INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

December 9, 2003

TO: Interested Parties / Applicant

RE: 3M / T009-7712-00004

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).
For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:
(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:
(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and

(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNTVOP.dot 9/16/03

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

3M
304S 075E
Hartford City, Indiana 47348

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T009-7712-00004	
Issued by: Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date:December 8, 2003 Expiration Date:December 8, 2008

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a tapes, labels and extruded web manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	304S 075E, Hartford City, Indiana 47348
Mailing Address:	Environmental Technology & Services, Building 42-2E-27, P.O. Box 33331, St. Paul, Minnesota, 55133-3331
SIC Codes:	2672, 3081
County Location:	Blackford
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) BA Coating Line, identified as EU001, constructed in 1963, consisting of the following equipment:

Two (2) coating stations (coating stations 1 and 2), installed in 1963, and one (1) coating station (coating station 3), installed in 1995, each applying coatings with methods including, but not limited to, gravure, reverse roll, extrusion die, hopper/knife, and/or slot die, utilizing thermal oxidizer No. 2, identified as C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

(b) One (1) BC-1 Coating Line, identified as EU002, constructed in 1963, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, pressure fed die, gravure, curtain and/or fluid bed, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001;

(c) One (1) BC-2 Coating Line, identified as EU003, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, wrap cast, reverse roll, gravure, and/or reverse gravure, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting

to stack S/V888-001. This Coating Line was changed as per a permit issued on July 10, 1998;

(d) One (1) VCS Coating Line, identified as EU004, constructed in 1994, consisting of the following equipment:

(1) One (1) compounding room, constructed in 1994, exhausting to stack S/V 001-001;

(2) One (1) coating station, installed in 1994, applying coatings with methods including, but not limited to, reverse roll, gravure, reverse gravure, flexographic, and/or pressure fed die methods, utilizing thermal oxidizer No. 1, C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001;

(e) One (1) Extrusion Line, identified as EU005, constructed in 1996, consisting of one (1) extruder, calendar rolls, and one (1) oven, utilizing thermal oxidizer No. 2, C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

(f) One (1) compounding/mix & mill area, identified as EU007, containing variety of mixing vessels, each constructed between 1957-1995, used for mixing in the compounding area;

(g) Three (3) boilers, identified as EU008, EU009, and EU010, each constructed in 1986, each with a maximum heat input capacity of 12.553 MMBtu per hour, each combusting natural gas and No.2 Fuel Oil, exhausting to stacks S/V 001-005, 001-006, and 001-007, respectively;

(h) Six (6) outdoor bulk storage tanks, identified as T001, T003, T006, T008, T009 and T012, each constructed in 1988, 1976, 1986, 1999, 1985 and 2000, respectively, each with a maximum tank capacity of 30,000, 20,000, 30,000, 275, 275 and 275 gallons, respectively, each containing volatile organic liquids with maximum true vapor pressure less than 15.0 kPa; and

(i) Four (4) indoor bulk storage tanks, identified as T002, T004, T005, and T007, each constructed in 1997, 1997, 1997, and 1992, respectively, each with a maximum tank capacity of 300, 300, 300 and 7500 gallons, respectively, each containing volatile organic liquids with maximum true vapor pressure less than 15.0 kPa, and a fifth indoor tank, To11, constructed in 1991, with a maximum tank capacity of 1500 gallons, inactive at the time of issuance of the permit but with the potential for holding volatile organic liquids with maximum true vapor pressure less than 15.0 k Pa.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-2].

(b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2(e)];

(c) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or

trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2(e)];

(d) Paved and unpaved roads and parking lots with public access [326 IAC 6-4-3].

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) In addition to the non applicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:

(1) BA Coating Line is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR) because of the following reasons:

(i) The BA Coating Line was originally constructed in 1963 (prior to the applicability date of December 30, 1980);

(ii) The changes to the BA Coating Line do not constitute a reconstruction because the fixed cost of the new equipment does not exceed 50% of the fixed capital cost required to construct an entirely new facility; and

(iii) The changes to the BA Coating Line do not constitute a modification. The NSPS modification provisions of 40 CFR 60.14 apply when a physical or operational change occurs which could result in an increase in the hourly potential emissions, unless such change qualifies for one of the exemptions at 40 CFR 60.14(e). The emission rate before and after a physical or operational change is evaluated by comparing the hourly potential emissions under maximum capacity immediately before the change to emissions at maximum capacity after the change. Under the General Provisions of the NSPS, only physical limitations on maximum capacity are considered in determining potential emissions. 3M has provided with adequate evidence to IDEM that there was a decrease in the hourly potential emissions based on the maximum capacity, as a result of the 1995 changes made to the BA Coater. The changes made to the BA Coater in 1995 decreased the maximum exhaust flow rate thereby decreasing the potential emissions from 2,332 lbs/hr to 752 lbs/hr.

(2) BC-1 Coating Line is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR), because none of the equipment for this coating line was constructed, reconstructed, or modified after the December 30, 1980 rule applicability date.

(3) BC-2 Coating Line is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR) because pursuant to CP-009-9364-00004, issued on July 10, 1998:

(i) The BC-2 Coating Line was originally constructed in 1963 (prior to the applicability date of December 30, 1980);

(ii) The changes to the BC-2 Coating Line do not constitute a reconstruction because the fixed cost of the new equipment does not exceed 50% of the fixed capital cost required to construct an entirely new facility; and

(iii) The changes to the BC-2 Coating Line do not constitute a modification. The NSPS modification provisions of 40 CFR 60.14 apply when a physical or operational change occurs which could result in an increase in the hourly potential emissions, unless such change qualifies for one of the exemptions at 40 CFR 60.14(e). The emission rate before and after a physical or operational change is evaluated by comparing the hourly potential emissions under maximum capacity immediately before the change to emissions at maximum capacity after the change. Under the General Provisions of the NSPS, only physical limitations on maximum capacity are considered in determining potential emissions. There was no change to the maximum capacity or hourly potential emissions based on the maximum capacity, as a result of the 1998 changes made to the BC-2 Coater.

(4) The three (3) boilers (EU008, EU009, EU010), all constructed in 1986, are not subject to New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(5) The storage tanks T001 and T006 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110 and 110a, Subparts K and Ka) because the tanks were constructed in 1988 and 1986, respectively, and the storage capacity of each tank is less than 40,000 gallons.

(6) Storage tanks T003 is not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because it was constructed in 1976, prior to the rule applicability date of July 23, 1984 for Kb, and because the storage capacity of the tank is less than 40,000 gallons for K and Ka.

(7) Storage tanks T008, T009, and T012 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because the tanks were constructed in 1999, 1985 and 2000, respectively, and the storage tank capacity of each tank is less than 40 cubic meters for Kb.

(8) Storage tanks T002, T004, T005, T007 and T011 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because the tanks were constructed in 1997, 1997, 1997, 1992 and 1991, respectively, and the storage capacity of each tank is less than 40 cubic meters for Kb.

(9) This source is not subject to New Source Performance Standard, 326 IAC 12, (40 CFR 60.430, Subpart QQ) because the affected facility to which the provisions of this subpart apply is for publication rotogravure printing press. This source does not use publication rotogravure printing press.

(10) The degreasers are not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.460, Subpart T. The degreasers do not use any halogenated solvent cleaners.

(11) This source is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.701, Subpart EE. This source does not have any magnetic tape manufacturing operations.

(12) This source is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.820, Subpart KK. This source does not use publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses.

(13) This source is not subject to 326 IAC 2-2 (Prevention of Significant Deterioration). The source was initially constructed in 1957, prior to the August 7, 1977 (326 IAC 2-2, Prevention of Significant Deterioration) rule applicability date. Potential volatile organic compound (VOC) emissions from the source were greater than 250 tons per year on August 7, 1977 and is considered a PSD major source. The source had several modifications after the August 7, 1977 rule applicability date, none of which is a major modification pursuant this rule for the following reasons:

(A) The three (3) No. 2 Fuel Oil fired boilers, each constructed in 1986, did not trigger PSD applicability. The potential NOx emissions from each of the three (3) boilers were calculated to be 7.9 tpy, or 23.7 tpy (combined), when burning No. 2 Fuel Oil, based on the maximum boiler capacity and US EPA AP- 42 emissions factors, which is less than the PSD major modification significant emission rate threshold for NOx (as NO_2) of 40 tpy. The sulfur content of the No. 2 fuel oil used for the three (3) boilers shall be limited such that combined sulfur dioxide emissions from the three (3) boilers do not exceed 40 tons (PSD major modification significant emission rate threshold for SO_2) per year. Therefore, the construction of the three boilers was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(B) Pursuant to CP-009-3127-00004, issued on March 7, 1994, the VCS Coating Line did not trigger PSD applicability. The controlled potential to emit VOC from this facility is equal to 9.20 tpy, after enforceable controls utilizing a thermal oxidizer for VOC emission control. This is less than PSD major modification significant emission rate threshold for VOC of 40 tpy. Therefore, the installation of VCS coating line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(C) Pursuant to CP-009-3871-00004, issued on July 14, 1995, the modification of the BA Coating Line did not trigger PSD applicability. This modification was not a major modification pursuant to 326 IAC 2-2 because the source agreed to limit future actual VOC emissions from the BA Coating Line to no more than 39 tpy above the baseline actual emissions for the existing line. Pursuant to 40 CFR 52.21(B)(21) and 326 IAC 2-2-1(b), actual emissions are generally defined in terms of the two (2) year period preceding a modification when such time-frame represents normal operations. However, the same definition provides for the use of a different 2-year period if such is more representative of normal source operations. During the permit review process for CP009-3871, 3M provided information to IDEM to show that the BA Coater did not have actual emissions reflective of normal operations during any 2-year period after 1989, and that the proposed modification would result in more normal, pre-1989, operations. As such, IDEM, OAQ, agreed that the 2-year period, 1989-1990, would represent normal operations and the related average actual emission rate was determined as 967 tons VOC per year. For the BA Coating Line modification, the total VOC emission rate was limited to 967 tpy, plus 39 tpy, or 1,006 tpy. Therefore, the modification of the BA Coating Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). This emission limit notwithstanding, the source also decided to use a thermal oxidizer on the BA Coating line with a VOC control efficiency (capture/destruction) of 75% after the modification. Therefore, the PTE for the BA Coating Line modification, after the installation of thermal oxidizer and in conjunction with VOC usage limit of 1006 tpy, was 252 tpy.

(D) Pursuant to CP-009-5747-00004, issued on June 4, 1996, the Extrusion Line did not trigger PSD applicability. The controlled potential to emit VOC from this facility is equal to 14 tpy, after enforceable controls utilizing a thermal oxidizer for VOC emission control. This is less than PSD major modification significant emission rate threshold for VOC of 40 tpy. Therefore, the installation of Extrusion Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(E) Pursuant to CP-009-9364-00004, issued on July 10, 1998, the modification of the BC-2 Coating Line did not trigger PSD applicability. This modification was not a major modification pursuant to 326 IAC 2-2 because this source agreed to limit future VOC emissions from the BC-2 Coating Line to no more than 39 tpy above the baseline actual emissions for the line. Pursuant to 40 CFR 52.21(B)(21) and 326 IAC 2-2-1(b), actual emissions are generally defined in terms of the two (2) year period preceding a modification when such time-frame represents normal operations. However, the same definition provides for the use of a different 2-year period if such is more representative of normal source operations. During the permit review process for CP009-9364, 3M provided information to IDEM to show that the BC-2 Coater did not have actual emissions reflective of normal operations during any 2-year period after 1993, and that the proposed modification would result in more normal, pre-1993, operations. As such, IDEM, OAQ, agreed that the 2-year period, 1992-1993, would represent normal operations and the related average actual emission rate was determined as 446 tons VOC per year. For the BC-2 Coating Line modification, the total VOC emission rate was limited to 446 tpy, plus 39 tpy, or 485 tpy. Therefore, the modification of the BC-2 Coating Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(14) This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

All the emission units and pollution control equipment for this source were constructed before the July 27, 1997 rule applicability date. Therefore the requirements of this rule do not apply to this source.

(15) The oven zones from the BA, BC-1, BC-2, VCS Coating Lines and the heaters from the Extrusion Line are not subject to 326 IAC 6-2-4 (Emission Limitations for Sources of Indirect Heating). The oven zones from the BA, BC-1, BC-2, VCS Coating Line and the heaters from the Extrusion Line are not indirect heating facilities.

(16) The BC-1 and BC-2 Coating Lines are not subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements). This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of 25 or more tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). The two (2) Coating Lines were constructed before 1980, therefore, the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply.

(17) The VCS Coating Line is not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because it is subject to the requirements of 326 IAC 8-2-5 (Paper Coating Operations).

(18) The BC-1 and BC-2 Coating Lines are not subject to 326 IAC 8-2-5 (Paper Coating Operations). The two (2) Coating Lines are located in Blackford County and were constructed prior to the applicability date of January 1, 1980, specified in 326 IAC 8-2-1(a)(2).

(19) This source is not subject to 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities). This rule applies to all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (thirty-nine thousand (39,000) gallons) containing volatile organic compounds whose true vapor pressure is greater than 10.5 kPa (1.52 psi). Tanks (T001-T011) are not subject to 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) because these petroleum liquid storage vessels have capacities less than 39,000 gallons.

(20) This source is not subject to 326 IAC 8-6 (Organic Solvent Emission Limitations) This rule applies to sources existing as of January 1, 1980, located in Lake and Marion Counties, as well as to facilities commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. All the facilities for this source, located in Blackford County were either constructed before October 7, 1974 or after January 1, 1980. Therefore, this rule does not apply to this source.

(21) This source is not subject to 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter. Clark and Floyd Counties). The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd Counties that emit or have the potential to emit VOCs at levels equal to or greater than 25 tons per year in Lake and Porter Counties; 100 tons per year in Clark and Floyd Counties; and to any coating facility that emits or has the potential to emit 10 tons per year or greater in Lake, Porter, Clark or Floyd County. The source is located in Blackford County. Therefore, this rule is not applicable to this source.

(22) This source is not subject to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels). On and after October 1, 1995, this rule applies to stationary vessels used to store volatile organic liquid (VOL) that are located in Clark, Floyd, Lake, or Porter County. Tanks (T001-T011) are not subject to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), because these tanks are located in Blackford County.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)].

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C **SOURCE OPERATION CONDITIONS**

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission units, compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5][326 IAC 2-7-6]

(a) The Permittee is required prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) BA Coating Line, identified as EU001, constructed in 1963, consisting of the following equipment:

Two (2) coating stations (coating stations 1 and 2), installed in 1963, and one (1) coating station (coating station 3), installed in 1995, each applying coatings with methods including, but not limited to, gravure, reverse roll, extrusion die, hopper/knife, and/or slot die, utilizing thermal oxidizer No. 2, identified as C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the BA Coating Line, except when otherwise specified in 40 CFR Part 63, Subpart JJJJ. The Permittee must comply with these requirements on and after the effective date, which is December 4, 2002, of the National Emission Standards or Hazardous Air Pollutants: Paper and Other Web Surface Coating.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.1.2 National Emissions Standards for Hazardous Air Pollutants for Paper and Other Web-Surface Coating [40 CFR Part 63.3280, Subpart JJJJ] [326 IAC 20]

(a) The paper coating affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web (Surface Coating) (40 CFR Part 63, Subpart JJJJ), effective and published in Federal Register on December 4, 2002. A copy of this rule is available on the U.S. EPA Air Toxics website, http://www.epa.gov/ttn/atw/powc/powcpg.html. Pursuant to this rule, the Permittee must comply with Subpart JJJJ by December 5, 2005, or accept and meet an enforceable HAP emissions limit below the major source threshold prior to December 5, 2005.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(c) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart JJJJ:

One (1) BA Coating Line, identified as EU001, constructed in 1963, consisting of the following equipment:

Two (2) coating stations (coating stations 1 and 2), installed in 1963, and one (1) coating station (coating station 3), installed in 1995, each applying coatings with methods including, but not limited to, gravure, reverse roll, extrusion die, hopper/knife, and/or slot die, utilizing thermal oxidizer No. 2, identified as C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002.

(d) The definitions of 40 CFR 63, Subpart JJJJ at 40 CFR 63.3310 are incorporated by reference.

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-5] [326 IAC 2-2]

(1) Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the owner or operator shall not allow the discharge into the atmosphere VOC in excess of 2.9 pounds VOC per gallon of coating, excluding water, as delivered to the applicator.

Pursuant to 326 IAC 8-1-2 (b), the VOC emissions from the BA Coating Line shall be limited to no greater than the equivalent emissions, expressed as 4.79 pounds of VOC per gallon of coating solids.

This equivalency was determined by the following equation:

$$E = L / (1 - (L/D))$$

Where:

- L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
- D= Density of VOC in coating in pounds per gallon of VOC;
- E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the thermal oxidizer shall be no less than 66.5%, based on the worst case coating VOC content of 4.86 lbs / gallon coating less water, and calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

- V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
- E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
- O = Equivalent overall efficiency of the capture system and control device as a percentage.

(b) Pursuant to CP-009-3871-00004, issued on July 14, 1995, the VOC input to the BA Coating Line shall be limited to 1,006 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit in conjunction with condition D.1.3(a) limits the potential to emit VOC to 252 tons per year.

(c) A fifteen (15) minute period per calendar month shall be allowed to exercise the purge stack dampers provided that a monthly summary including time and date of each exercising period is recorded and submitted to the OAQ upon request.

(d) Compliance with this Condition shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer to achieve compliance with condition D.1.3.

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after the issuance of the permit, the Permittee shall conduct a performance test to verify VOC control efficiency as per condition D.1.3 (a) and (c) for the thermal oxidizer utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.1.7 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below 1400 ^{0}F. A 3-hour average temperature that is below 1400 ^{0}F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.1.3(a) and (c), as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the 3-hour average temperature as observed during the compliant stack test. A 3-hour average temperature that is below the 3-hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance

Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per day when the BA Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5.6 inches of water column or a range established in the latest stack test, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

(a) To document compliance with condition D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission and usage limits established in condition D.1.3. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The calculated weight of the VOC per volume of coating solids, for each coating (lb VOC / gal solids).

(4) The monthly cleanup solvent usage.

(5) The total VOC usage for each month.

(6) The weight of VOC emitted for each compliance period.

(b) To document compliance with conditions D.1.7 and D.1.8, the Permittee shall maintain the following:

(1) Continuous temperature records (on a 3-hour average basis) for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) Daily records of the duct pressure.

(c) To document compliance with Condition D.1.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 (d) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.11 Notification Requirements [40 CFR 63.3400] [326 IAC20]

(1) General. The Permittee must submit the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the Permittee by the dates specified in those sections, except as provided in 40 CFR 63.3400, paragraphs (b), (d) and (e).

(b) Initial Notification. The Permittee must submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than December 5, 2004.

(c) Notification of Intent to Conduct a Performance Test. The Permittee must submit a notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin, but no later than April 4, 2006.

(d) Notification of Compliance Status. The Permittee must submit the a Notification of Compliance Status as specified in 40 CFR 63.9(h) no later than August 2, 2006.

(e) The notifications required by paragraphs (a) through (d) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.12 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart JJJJ, a description of the affected source and

activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than nine (9) months prior to the compliance date, which is December 5, 2005.

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(b) One (1) BC-1 Coating Line, identified as EU002, constructed in 1963, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, pressure fed die, gravure, curtain and/or fluid bed, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001;

(c) One (1) BC-2 Coating Line, identified as EU003, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, wrap cast, reverse roll, gravure, and/or reverse gravure, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001. This Coating Line was changed as per a permit issued on July 10, 1998;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the BA Coating Line, except when otherwise specified in 40 CFR Part 63, Subpart JJJJ. The Permittee must comply with these requirements on and after the effective date, which is December 4, 2002, of the National Emission Standards or Hazardous Air Pollutants: Paper and Other Web Surface Coating.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.2.2 National Emissions Standards for Hazardous Air Pollutants for Paper and Other Web-Surface Coating [40 CFR Part 63.3280, Subpart JJJJ] [326 IAC 20]

(a) The paper coating affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web (Surface Coating) (40 CFR Part 63, Subpart JJJJ), effective and published in Federal Register on December 4, 2002. A copy of this rule is available on the U.S. EPA Air Toxics website, http://www.epa.gov/ttn/atw/powc/powcpg.html. Pursuant to this rule, the Permittee must comply with Subpart JJJJ by December 5, 2005, or accept and meet an enforceable HAP emissions limit below the major source threshold prior to December 5, 2005.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(c) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart JJJJ:

(a) One (1) BC-1 Coating Line, identified as EU002, constructed in 1963, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, pressure fed die, gravure, curtain and/or fluid bed, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001;

(b) One (1) BC-2 Coating Line, identified as EU003, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, wrap cast, reverse roll, gravure, and/or reverse gravure, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V888-001. This Coating Line was changed as per a permit issued on July 10, 1998;

(d) The definitions of 40 CFR 63, Subpart JJJJ at 40 CFR 63.3310 are incorporated by reference.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to CP-009-9364-00004, issued on July 10, 1998, the following is a summary of the BC-2 Coating Line VOC emission limitation:

(a) The VOC input to the BC-2 Coating Line when operating without controls added to the VOC input to the BC-2 coater when the capture system and thermal oxidizer are in operation shall be limited such that the potential to emit (PTE) VOCs based on the following equations does not exceed 485 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

$$E_{VOC} = (u_u * W_{u,avg}) + (u_c * W_{c,avg} * (1-c_{eff})) \quad (i)$$

$$PTE_{VOC} = (E_{VOC,this\ month} + E_{VOC,\ last\ 11\text{-}months}) \quad (ii)$$

where: E_{VOC} = the monthly emissions of VOCs in tons per month

u_u = The total amount of uncontrolled coatings used in tons per month (when the capture system or thermal oxidizer is not operating)

$w_{u,avg}$ = the monthly weighted average weight percent (%) VOC of uncontrolled coatings used

u_c = the total amount of controlled coatings used in tons per month (when both the capture system and thermal oxidizer are operating)

$w_{c,avg}$ = the monthly usage weighted average weight percent (%) VOC of controlled coatings used

c_{eff} = the overall control efficiency of the control system

PTE_{VOC} = the potential to emit VOCs in tons per twelve (12) consecutive month period

(b) Compliance with this VOC input limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.2.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer for the BC-2 Coating Line as required to achieve compliance with condition D.2.3.

D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after the issuance of the permit, the Permittee shall conduct a performance test to verify VOC control efficiency is always maintained at or above 78.8% as per condition D.2.3(a) for the thermal oxidizer for the BC-2 Coating Line, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.2.7 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below 1400 ^{0}F. A 3-hour average temperature that is below 1400 ^{0}F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.2.3(a) (BC-2 Coating Line), as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the 3-hour average temperature as observed during the compliant stack test. A 3-hour average temperature that is below the 3-hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.8 Parametric Monitoring for Compliance with Limits in D.2.3 (BC-2 Line)

The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per day when the BC-2 Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5 inches of water column or a range established in the latest stack test, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A

pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

(a) To document compliance with condition D.2.3(a), the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission and usage limits established in condition D.2.3(a). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(1) The calculated weight of the VOC per volume of coating solids, for each coating (lb VOC / gal solids).

(2) The monthly cleanup solvent usage.

(3) The total VOC usage for each month.

(4) The weight of VOC emitted for each compliance period.

(b) To document compliance with conditions D.2.7 and D.2.8, the Permittee shall maintain the following:

(1) Continuous temperature records (on a 3-hour average basis) for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) Daily records of the duct pressure.

(c) To document compliance with Condition D.2.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

D.2.11 Notification Requirements [40 CFR 63.3400] [326 IAC20]

(1) General. The Permittee must submit the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the Permittee by the dates specified in those sections, except as provided in 40 CFR 63.3400, paragraphs (b), (d) and (e).

(b) Initial Notification. The Permittee must submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than December 5, 2004.

(c) Notification of Intent to Conduct a Performance Test. The Permittee must submit a notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin, but no later than April 4, 2006.

(d) Notification of Compliance Status. The Permittee must submit the a Notification of Compliance Status as specified in 40 CFR 63.9(h) no later than August 2, 2006.

(e) The notifications required by paragraphs (a) through (d) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.2.12 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart JJJJ, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than nine (9) months prior to the compliance date, which is December 5, 2005.

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(d) One (1) VCS Coating Line, identified as EU004, constructed in 1994, consisting of the following equipment:

(1) One (1) compounding room, constructed in 1994, exhausting to stack S/V 001-001;

(2) One (1) coating station, installed in 1994, applying coatings with methods including, but not limited to, reverse roll, gravure, reverse gravure, flexographic, and/or pressure fed die methods, utilizing thermal oxidizer No. 1, C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the BA Coating Line, except when otherwise specified in 40 CFR Part 63, Subpart JJJJ. The Permittee must comply with these requirements on and after the effective date, which is December 4, 2002, of the National Emission Standards or Hazardous Air Pollutants: Paper and Other Web Surface Coating.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.3.2 National Emissions Standards for Hazardous Air Pollutants for Paper and Other Web-Surface Coating [40 CFR Part 63.3280, Subpart JJJJ] [326 IAC 20]

(a) The paper coating affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web (Surface Coating) (40 CFR Part 63, Subpart JJJJ), effective and published in Federal Register on December 4, 2002. A copy of this rule is available on the U.S. EPA Air Toxics website, http://www.epa.gov/ttn/atw/powc/powcpg.html. Pursuant to this rule, the Permittee must comply with Subpart JJJJ by December 5, 2005, or accept and meet an enforceable HAP emissions limit below the major source threshold prior to December 5, 2005.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(c) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart JJJJ:

One (1) VCS Coating Line, identified as EU004, constructed in 1994, consisting of the following equipment:

(1) One (1) compounding room, constructed in 1994, exhausting to stack S/V 001-001;

(2) One (1) coating station, installed in 1994, applying coatings with methods including, but not limited to, reverse roll, gravure, reverse gravure, flexographic, and/or pressure fed die methods, utilizing thermal oxidizer No. 1, C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001.

(d) The definitions of 40 CFR 63, Subpart JJJJ at 40 CFR 63.3310 are incorporated by reference.

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-5][326 IAC 2-2][326 IAC 12] [40 CFR 60.442]

(a) Pursuant to 40 CFR 60.442, Subpart RR, the VCS Coating Line:

(1) Shall use a thermal oxidizer (minimum of 90 % overall destruction efficiency), whenever the solvent-based coating solution is used, or

(2) Shall discharge no greater than 0.2 kg VOC/kg of coating solids applied, whenever the water based coating solution is used.

(b) Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the owner or operator shall not allow the discharge into the atmosphere VOC in excess of 2.9 pounds VOC per gallon of coating, excluding water, as delivered to the applicator.

Based on the information presented in CP-009-3127-00004, issued on March 7, 1994, the water based coating solutions for the VCS Coating Line contain negligible volatile organic compounds (VOC) and have VOC content of less than 2.9 pounds per gallon of coating.

Pursuant to 326 IAC 8-1-2 (b), the VOC emissions from the VCS Coating Line when using solvent based coatings shall be limited to no greater than the equivalent emissions, expressed as 4.79 pounds of VOC per gallon of coating solids.

This equivalency was determined by the following equation:

$$E = L / (1 - (L/D))$$

Where:

L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
D= Density of VOC in coating in pounds per gallon of VOC;
E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the thermal oxidizer shall be no less than 66.5%, based on the worst case coating VOC content of 4.86 lbs / gallon coating less water, and calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject

coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.

E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

O = Equivalent overall efficiency of the capture system and control device as a percentage.

(c) The thermal oxidizer shall be operated at all times to achieve the limit pursuant to 326 IAC 8-2-5 of 2.9 pounds of VOC emitted to the atmosphere per gallon of coating less water and the thermal oxidizer shall maintain a minimum 90% overall control efficiency pursuant to 326 IAC 12 and 40 CFR 60.442.

(d) The total VOC usage at this facility shall be limited to 92 tons per year, utilizing a thermal oxidizer for VOC emission control. Compliance with this limitation shall limit this modification to less than the PSD major modification VOC significant emission rate threshold of 40 tpy. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.3.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer at all times when the VCS Coating Line is operating and not coating with water-based coating solutions, to achieve compliance with conditions D.3.3(a) and (d).

D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after the issuance of the permit, the Permittee shall conduct a performance test to verify VOC control efficiency as required in condition D.3.3 for the thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.7 VOC Emissions

Compliance with condition D.3.3 (a) and (d) shall be demonstrated within 30 days of the end of each month. This shall be based on the total volatile organic compound emitted for the previous month, and adding it to the previous 11 months total VOC emitted to determine VOC emissions for the most recent 12 consecutive month period . The VOC emissions for a month can be determined by using the following equation for VOC input:

VOC emitted = [(VOC input) x (100 - % overall control efficiency)]

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.3.8 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports

whenever the 3-hour average temperature of the thermal oxidizer is below 1400 ^{0}F. A 3-hour average temperature that is below 1400 ^{0}F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.3.3, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the 3-hour average temperature as observed during the compliant stack test. A 3-hour average temperature that is below the 3-hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per day when the VCS Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5 inches of water column or a range established in the latest stack test, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

(a) To document compliance with condition D.3.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission and usage limits established in condition D.3.3. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The calculated weight of the VOC per volume of coating solids, for each coating used (lb VOC / gal solids).

(4) The monthly cleanup solvent usage.

(5) The total VOC usage for each month.

(6) The weight of VOC emitted for each compliance period.

(b) To document compliance with conditions D.3.8 and D.3.9, the Permittee shall maintain the following:

(1) Continuous temperature records (on a 3-hour average basis) for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) Daily records of the duct pressure.

(c) To document compliance with Condition D.3.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.11 Reporting Requirements

A quarterly summary of the information to document compliance with condition D.3.3(d) shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.3.12 Notification Requirements [40 CFR 63.3400] [326 IAC20]

(1) General. The Permittee must submit the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the Permittee by the dates specified in those sections, except as provided in 40 CFR 63.3400, paragraphs (b), (d) and (e).

(b) Initial Notification. The Permittee must submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than December 5, 2004.

(c) Notification of Intent to Conduct a Performance Test. The Permittee must submit a notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin, but no later than April 4, 2006.

(d) Notification of Compliance Status. The Permittee must submit the a Notification of Compliance Status as specified in 40 CFR 63.9(h) no later than August 2, 2006.

(e) The notifications required by paragraphs (a) through (d) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.3.13 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart JJJJ, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than nine (9) months prior to the compliance date, which is December 5, 2005.

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(e) One (1) Extrusion Line, identified as EU005, constructed in 1996, consisting of one (1) extruder, calendar rolls, and one (1) oven, utilizing thermal oxidizer No. 2 ,C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the BA Coating Line, except when otherwise specified in 40 CFR Part 63, Subpart JJJJ. The Permittee must comply with these requirements on and after the effective date, which is December 4, 2002, of the National Emission Standards or Hazardous Air Pollutants: Paper and Other Web Surface Coating.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

D.4.2 National Emissions Standards for Hazardous Air Pollutants for Paper and Other Web-Surface Coating [40 CFR Part 63.3280, Subpart JJJJ] [326 IAC 20]

(a) The paper coating affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web (Surface Coating) (40 CFR Part 63, Subpart JJJJ), effective and published in Federal Register on December 4, 2002. A copy of this rule is available on the U.S. EPA Air Toxics website, http://www.epa.gov/ttn/atw/powc/powcpg.html. Pursuant to this rule, the Permittee must comply with Subpart JJJJ by December 5, 2005, or accept and meet an enforceable HAP emissions limit below the major source threshold prior to December 5, 2005.

(b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.

(c) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart JJJJ:

One (1) Extrusion Line, identified as EU005, constructed in 1996, consisting of one (1) extruder, calendar rolls, and one (1) oven, utilizing thermal oxidizer No. 2, C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002.

(d) The definitions of 40 CFR 63, Subpart JJJJ at 40 CFR 63.3310 are incorporated by reference.

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6][326 IAC 2-2]

(a) Pursuant to CP 009-5147-00004, issued on June 4, 1996 and 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), a thermal oxidizer with a minimum combustion chamber temperature of 1400° F, using a 3-hour rolling average or a more appropriate temperature as determined by the most recent stack test data, for a minimum overall efficiency of 90%, shall be operated at all times the Extrusion Line is in operation. This is accepted by OAQ as a Best Available Control Technology (BACT) for this facility. Therefore, the Extrusion Line complies with this rule.

(b) Pursuant to CP-009-5147-00004, issued on June 4, 1996, the input usage of VOC, including coatings, dilution solvents, and cleaning solvents, shall be limited to 140 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this condition, in conjunction with (a) of this condition, shall limit the potential to emit VOC from the Extrusion Line to less than 40 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.4.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer at all times when the Extrusion Line is operating to achieve compliance with conditions D.4.3

D.4.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after the issuance of the permit, the Permittee shall conduct a performance test to verify VOC control efficiency as required in condition D.4.3 for the thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.4.7 VOC Emissions

Compliance with condition D.4.3(a) shall be demonstrated within 30 days of the end of each month. This shall be based on the total volatile organic compound emitted for the previous month, and adding it to the previous 11 months total VOC emitted to determine VOC emissions for the most recent 12 consecutive month period . The VOC emissions for a month can be determined by using the following equation for VOC input:

VOC emitted = [(VOC input) x (100 - % overall control efficiency)]

D.4.8 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature of 1400 ^{0}F on a 3-hour average.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.4.3, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

D.4.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per day when the Extrusion Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5.6 inches of water column or a range established in the latest stack test, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.10 Record Keeping Requirements

(a) To document compliance with conditions D.4.3, D.4.8 and D.4.9, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit for the Extrusion Line established in condition D.4.3 and the compliance determination conditions in D.4.8 and D.4.9.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The monthly cleanup solvent usage.

(4) The total VOC usage for each month.

(5) The continuous temperature records (on a 3-hour average basis) for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(6) Daily records of the duct pressure.

(b) To document compliance with Condition D.4.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.11 Reporting Requirements

A quarterly summary of the information to document compliance with condition D.4.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.4.12 Notification Requirements [40 CFR 63.3400] [326 IAC20]

(1) General. The Permittee must submit the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the Permittee by the dates specified in those sections, except as provided in 40 CFR 63.3400, paragraphs (b), (d) and (e).

(b) Initial Notification. The Permittee must submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than December 5, 2004.

(c) Notification of Intent to Conduct a Performance Test. The Permittee must submit a notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin, but no later than April 4, 2006.

(d) Notification of Compliance Status. The Permittee must submit the a Notification of Compliance Status as specified in 40 CFR 63.9(h) no later than August 2, 2006.

(e) The notifications required by paragraphs (a) through (d) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.4.13 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart JJJJ, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than nine (9) months prior to the compliance date, which is December 5, 2005.

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(g) Three (3) boilers, identified as EU008, EU009, and EU010, each constructed in 1986, each with a maximum heat input capacity of 12.553 MMBtu per hour, each combusting natural gas and No.2 Fuel Oil, exhausting to stacks S/V 001-005, 001-006, and 001-007, respectively;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1][326 IAC 2-2]

Pursuant to 326 IAC 7-1.1-1:

(a) The combined SO_2 emissions from the three (3) boilers shall be no greater than five-tenths (0.5) pound per million Btu for fuel oil combustion.

(b) The maximum fuel oil sulfur content shall be limited to less than 0.24% sulfur by weight.

Compliance with D.5.1(b) shall also satisfy the requirements of D.5.1(a). Compliance with these limitations shall limit the SO_2 emissions from the three (3) boilers to less than 40 tons per 12 consecutive month period, with compliance determined at the end of each month. Compliance with this condition shall make the requirements of 326 IAC 2-2 (PSD) not applicable.

D.5.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from each of the three (3) boilers, based on a total heat input rate of 37.66 MMBtu per hour, shall be limited to 0.42 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = Pounds of particulate matter emitted per MMBtu heat input.
Q = Total source maximum operating capacity rating in MMBtu per hour.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control device.

Compliance Determination Requirements

D.5.4 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options:

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the three (3) 12.553 MMBtu/hr boilers, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.5 Visible Emissions Notations

(a) Visible emission notations of the three (3) boiler stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and burning oil. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.6 Reporting Requirements

The natural gas boiler certification shall be submitted to the address listed in section C- General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(h) Six (6) outdoor bulk storage tanks, identified as T001, T003, T006, T008, T009 and T012, each constructed in 1988, 1976, 1986, 1999, 1985 and 2000, respectively, each with a maximum tank capacity of 30,000, 20,000, 30,000, 275, 275 and 275 gallons, respectively, each containing volatile organic liquids with maximum true vapor pressure less than 15.0 kPa.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]

(a) To document compliance with 326 IAC 12 and 40 CFR 60.110b, Subpart Kb, the Permittee shall maintain permanent records at the source in accordance with (1) and (2) below for Tanks T001 and T006:

(1) The dimension of the storage vessels;

(2) An analysis showing the capacity of the storage vessels; and

(3) Vapor pressure of each organic liquid stored in tanks T001 and T006.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

Insignificant Activities

Facility Description [326 IAC 2-7-5(15)]

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.7.2 Volatile Organic Compounds (VOC) [326 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27
P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27
P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- C The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27
P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004

9	Natural Gas Only
9	Alternate Fuel burned From:_____ To:_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: 3M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27
P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004
Facility: BA Coating Line
Parameter: VOC Usage

Limit: BA Coating Line VOC usage shall be limited to 1,006 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Year:_____

Month	VOC Usage (tons) This Month	VOC Usage (tons) Previous 11 Months	VOC Usage (tons) 12 Month total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27, P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004
Facility: BC-2 Coating Line
Parameter: VOC Emissions
Limit: VOC emissions shall not exceed 485 tons per twelve (12) consecutive month period, with compliance determined at the end of each month based on the formula below.

Year:_____

Month	Uncontrolled Coatings Usage This Month (tons/month)	Volume Weighted Average VOC Content of Uncontroll-ed Coatings Used This Month (wt.%)	Weight of Uncontrolled VOCs Emitted This Month (tons/month)	Controlled Coatings Usage This Month (tons/month)	Volume Weighted Average VOC Content of Controlled Coatings Used This Month (wt.%)	Weight of Controlled VOCs Emitted This Month (tons/month)	Total Weight of Controlled and Uncontrolled VOCs Emitted This Month (tons/month)	Total Weight of Controlled and Uncontrolled VOCs Emitted Last 12 Months (tons/12 month)	Limit
									485
									485
									485

$E_{VOC} = (u_u * W_{u,avg}) + (u_c * W_{c,avg} * (1-c_{eff}))$ (i)

$PTE_{VOC} = (E_{VOC,this\ month} + E_{VOC,\ last\ 11\text{-}months})$ (ii)

where:
E_{VOC} = the monthly emissions of VOCs in tons per month
u_u = The total amount of uncontrolled coatings used in tons per month (when the capture system or thermal oxidizer is not operating)
$w_{u,avg}$ = the monthly usage weighted average weight percent (%) VOC of uncontrolled coatings used
u_c = the total amount of controlled coatings used in tons per month (when both the capture system and thermal oxidizer are operating)
$w_{c,avg}$ = the monthly usage weighted average weight percent (%) VOC of controlled coatings used
c_{eff} = the overall control efficiency of the control system
PTE_{VOC} = the potential to emit VOCs in tons per twelve (12) consecutive month period

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27, P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004
Facility: VCS Coating Line
Parameter: VOC Emissions

Limit: The VCS Coating Line VOC usage shall be limited to 92 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Year:_____

Month	VOC Emission (tons) This Month	VOC Emission (tons) Previous 11 Months	VOC Emission (tons) 12 Month total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27, P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004
Facility: Extrusion Line
Parameter: VOC Emissions
Limit: Extrusion Line VOC usage shall be limited to 140 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Year:_____

Month	VOC Emissions (tons) This Month	VOC Emissions (tons) Previous 11 Months	VOC Emissions (tons) 12 Month total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: 3 M
Source Address: 304S 075E, Hartford City, Indiana 47348
Mailing Address: Environmental Technology & Services, Building 42-2E-27, P.O. Box 33331, St. Paul, Minnesota, 55133-3331
Part 70 Permit No.: T009-7712-00004

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a Part 70 Permit

Source Name: 3M
Source Location: 304S 075E, Hartford City, Indiana 47348
County: Blackford
SIC Code: 2672, 3081
Operation Permit No.: T009-7712-00004
Permit Reviewer: Seema Roy / EVP

On September 2, 2003, the Office of Air Quality (OAQ) had a notice published in the News Times in Hartford, Indiana 47348, stating that 3M had applied for a Part 70 Permit for the operation of a stationary tapes, labels and extruded web manufacturing plant. The notice also stated that OAQ proposed to issue a Part 70 Permit for this operation and provided information on how the public could review the proposed Part 70 Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Permit should be issued as proposed.

On September 30, 2003, Wendy Reno, 3M submitted comments on the proposed Title V permit. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

Comment 1

3M asks that all references to "PTFE Extrusion Line" be revised to state "Extrusion Line." These references are in the Draft Title V permit as well as in the TSD. The references include, but are not limited to, the following: the Table of Contents, page 5 (D.4); Section A(2)(e); Section B.12 (b)(13)(D), page 17; Section B.12(b)(15), page 18; Section D.4 (Facility Description, and throughout this section); the Part 70 Quarterly Report, page 67; and in various places in the TSD.

Response 1

All references to "PTFE Extrusion Line" in the Part 70 Permit have been revised to state "Extrusion Line." This includes Table of Contents, page 5 (D.4); Section A(2)(e); Section B.12 (b)(13)(D), page 17; Section B.12(b)(15), page 18; Section D.4 (Facility Description, and throughout this section); the Part 70 Quarterly Report, page 67.

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Item (e) on Page 2 of 25 of the TSD has been amended in this addendum as follows:

(e) One ~~(1) Polytetrafluoroethylene (PTFE)~~ extrusion line, identified as EU005, constructed in 1996, consisting of one (1) extruder, calendar rolls, and one (1) oven, utilizing thermal oxidizer No. 2, C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

Item (a)(5) on Page 2 of 25 of the TSD has been amended in this addendum as follows:

(5) Heaters, located in the ~~PTFE~~ Extrusion Line;

The Potential to Emit After Issuance Table on page 7 of 25 of the TSD has been amended in this addendum as follows:

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_x	Worst Case Single HAPs	Total HAPs
BA Coating Line	0.00	0.00	0.00	251.50(1)	0.00	0.00	251.50(1)	251.50
BC-1 Coating Line	0.00	0.00	0.00	834.40(2)	0.00	0.00	834.40(2)	834.40
BC-2 Coating Line	0.00	0.00	0.00	485.00(3)	0.00	0.00	485.00(3)	485.00
VCS Coating Line	0.00	0.00	0.00	9.20(4)	0.00	0.00	9.20(4)	9.20
~~PTFE~~ Extrusion Line	0.00	0.00	0.00	14.00(5)	0.00	0.00	0.00	0.00
Compounding	0.00	0.00	0.00	3.30	0.00	0.00	3.69	3.69
Storage Tanks (T001-T003, T006-T011)	0.00	0.00	0.00	3.10	0.00	0.00	1.21	2.97
Boilers (#1,2,3)	2.40	1.30	<25.0	0.90	19.75	23.60	0.00	0.00
Thermal Oxidizers	0.40	1.50	0.10	1.10	16.60	19.70	0.00	0.00
Total Emissions	2.80	2.80	83.80	1602.50	36.31	43.30	1585.00	1586.76

Notes:

1. Pursuant to construction permit CP-009-3871-00004, issued on July 14, 1995, the throughput was limited to 1006 tpy and after 75% control of the thermal oxidizer the limited potential to emit of VOC was equal to 251.5 tpy. Also, since 3M wanted to keep the components of their coating mixture confidential, the worst case HAP was assumed to be equal to VOC emissions.
2. Limited potential to emit based on the maximum solvent usages (2800 tpy) as reported by the source, and a control efficiency of 70.20% for the thermal oxidizer.
3. Based on operating condition D.1.1 of construction permit CP-009-9364-00004, issued on July 10, 1998. Also, since 3M wanted to keep the components of their coating mixture confidential, the worst case HAP was assumed to be equal to VOC emissions.
4. VCS coating line emissions are based on construction permit CP-009-3127-00004, issued on March 7, 1994.
5. ~~PTFE~~ extrusion line emissions are based on construction permit, CP-009-5147-00004, issued on June 4, 1996.

Item (b) on Page 13 of 25 of the TSD has been amended in this addendum as follows:

(b) The pollutant-specific emission unit, as the BA, BC-1, BC-2, VCS and ~~PTFE Coating~~ **Extrusion** Lines, are each a “large unit” as described in 40 CFR 64.5. However, each Coating Line is subject to the MACT standards of 40 CFR 63, and pursuant to 40 CFR 64.2(b)(1)(i), these units are exempt from the requirements of 40 CFR 64. Therefore, this rule does not apply to this source.

Item (d) on Page 14 of 25 of the TSD has been amended in this addendum as follows:

(d) Pursuant to CP-009-5147-00004, issued on June 4, 1996, the ~~PTFE~~ Extrusion Line did not trigger PSD applicability. The controlled potential to emit VOC from this facility is equal to 14 tpy, after enforceable controls utilizing a thermal oxidizer for VOC emission control. This is less than PSD major modification significant emission rate threshold for VOC of 40 tpy. Therefore, the installation of ~~PTFE~~ Extrusion Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

Item (b) on Page 16 of 25 of the TSD has been amended in this addendum as follows:

(b) The oven zones from the BA, BC-1, BC-2, VCS Coating Lines and the heaters from the ~~PTFE~~ Extrusion Line are not subject to 326 IAC 6-2 (Emission Limitations for Sources of Indirect Heating). The oven zones from the BA, BC-1, BC-2, VCS Coating Line and the heaters from the ~~PTFE~~ Extrusion Line are not indirect heating facilities.

Item (a) on Page 16 of 25 of the TSD has been amended in this addendum as follows:

(a) The ~~PTFE~~ Extrusion Line is subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements). Pursuant to CP-009-5147-00004, issued on June 4, 1996, a thermal oxidizer with a minimum combustion chamber temperature of 1400° F, for a minimum overall efficiency of 90%, shall be operated at all times the ~~PTFE~~ Extrusion Line is in operation. This is accepted by OAQ as a Best Available Control Technology (BACT) for this facility. Therefore, the ~~PTFE~~ Extrusion Line complies with this rule.

Comment 2

Condition A.3. 3M Asks that this be designated as a state-only provision.

Response 2

Although 326 IAC 2-7-1(21) was defined by state, it has been approved by US EPA. Therefore, condition A.3 cannot be designated as a state-only provision.

Comment 3

Condition C.16(f). The General Conditions compliance monitoring plan requirements in Condition C.16(f) state that monitoring need not be performed when necessary to perform quality assurance and maintenance activities. However, it is unclear how this condition would be read in conjunction with Condition D.1.7 (or subsequent sections D.2.7(a), D.3.8(a) and D.4.8(a)), because Condition C.16(f) is prefaced by saying that it does not apply if there are more explicit requirements in Section D. Condition D.1.7 states that the continuous monitoring system for the thermal oxidizer be operating at all times when the thermal oxidizer is in operation. Accordingly, 3M asks that the permit be revised in Condition C.16(f), as follows: "All monitoring as required in Section D shall be performed when the emission unit is operating, except for monitoring downtime necessary to perform quality assurance and maintenance activities, which are not considered deviations. Acceptable monitoring downtime includes the following:

(a) sudden monitor breakdowns due to, among other things, power failures;
(b) damage to the monitoring system due to acts of God such as lightning strikes, tornadoes or floods which render the monitorinoperative."

3M has received this language in other states which have recognized there can still be a reasonable assurance of compliance even if there is occasional monitor breakdown. Here is additional background on this point:

1. A condition requiring continuous monitoring and recording of temperatures, with no possibility for any "blips" or even calibration checks, is unduly onerous. In addition, it is inconsistent with and much more onerous than recently proposed federal standards for continuous monitoring requirements.
2. For example, in the recently-proposed Miscellaneous Organic Chemical Manufacturing ("MON") National Emission Standards for Hazardous Air Pollutants, Section 63.2485(b), a source must monitor continuously (or collect data at all required intervals) at all times the source is operating, "<u>except for</u> monitor malfunctions, associated repairs, and required quality assurance or control

activities (including, as applicable, calibration checks and required zero and span adjustments)." 67 Fed. Reg. 16153, 16188 (Apr. 4, 2002) (emphasis added).

3. The final Paper and Other Webs Coating NESHAP has requirements for continuous parameter monitoring systems (which would include temperature monitoring) that require valid data from at least 90% of hours during which the process operated (and therefore allow for 10% of hours that may include downtime). 40 CFR 63.3350(e)(2), 67 Fed. Reg. 72329 (Dec. 4, 2002).

Finally, with respect to mechanical recorders that may breakdown, 3M would like the permit to recognize the option of manually recording information once per hour, or using process information to show compliance with relevant emission standards. Accordingly, 3M asks that Condition C.16(f) be revised to include the following language: "In the event of breakdown of a mechanical recorder, permittee may manually record information once per hour, or use process information to show compliance with emission standard."

Please make the same changes to the TSD, under the "Compliance Requirements" section.

Response 3

Sudden monitor and mechanical recorder breakdowns or damage due to, among other things, power failures, acts of God such as lightning strikes, tornadoes or floods are considered as "Emergency" which is addressed in C.16(e) . Therefore, no change has been made due to the comments.

Comment 4

Conditions D.1.6, D.2.6, D.3.6 and D.4.6 each require that 3M conduct a performance test for the thermal oxidizer within 180 days after issuance of the permit. 3M would like the flexibility to conduct this testing at any time before 270 days after the issuance of the permit, because of cold weather conditions. In addition, as previously noted, testing is required by the new final National Emission Standard for Hazardous Air Pollutants for Paper and Other Web Coating Operations (the "POWC MACT"). The POWC MACT requires a performance test within 180 days after the effective date of the emissions standards of that rule, which is December 5, 2005. As such, 3M asks that each of these conditions be revised to read as follows: "No later than 270 days after issuance of this permit, the Permittee shall conduct a performance test . . . ." Please make the changes to Conditions D.1.6, D.2.6, D.3.6 and D.4.6.

Response 4

In IDEM's opinion 3M is required to conduct the performance tests as soon as possible to show that they are in compliance with 326 IAC 8-2-5, 326 IAC 12, 40 CFR 60.442 and 326 IAC 8-1-6. Since the thermal oxidizer is already in operation for a long time and has gone through the try-out period, it can be tested whenever it is operating. 3M should be able to find days with weather suitable for testing within 180 days to conduct the performance tests. No changes have been made to conditions D.1.6, D.2.6, D.3.6 and D.4.6.

Comment 5

Condition D.1.9(b)(2). This subsection requires once per shift records of the duct pressure. Please revise this to read "daily records of the duct pressure." Please make the same change to Condition D.2.9(b)(2), D.3.10(b)(2), and D.4.10(a)(6). Also, please delete the reference to "fan amperage" from Condition D.4.10(a)(6).

Response 5

OAQ agrees that checking thermal oxidizer duct pressure once per day is sufficient to determine whether the control equipment is operating properly. Therefore, 3M is required to maintain daily records of the duct pressure. Conditions D.1.9(b)(2), D.2.9(b)(2) and D.3.10(b)(2) have been revised as follows:

(2) ~~Once per shift~~ **Daily** records of the duct pressure.

The reference to "fan amperage" from Condition D.4.10(a)(6) has been deleted.

Conditions D.1.8, and similarly for conditions D.2.8 and D.3.9, has also been amended as follows:

D.1.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per ~~shift~~ **day** when the BA Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5.6 inches of water column or a range established in the latest stack test, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Comment 6

Condition D.2.8. 3M asks that this condition be revised to make clear that this condition is applicable to the thermal oxidizer for purposes of the BC-2 Coating Line. 3M asks that this be revised to read "Parametric Monitoring for Compliance with Limits in D.2.3 (BC-2 Line)."

Response 6

The title line for Condition D.2.8 has been revised as follows:

D.2.8 Parametric Monitoring **for Compliance with Limits in D.2.3 (BC-2 Line)**

Comment 7

Condition D.3.10(b)(2). This section requires "once per shift records of the duct pressure." 3M asks that this be revised as follows: "Daily records of the duct pressure."

Response 7

This change has already been made as a result of comment 5.

Comment 8

Condition D.4.5. This condition requires that the thermal oxidizer be in operation "at all times when the PTFE Extrusion Line is operating to achieve compliance with conditions D.4.3." 3M is still concerned that this condition might be read to require thermal oxidizer operation at times that portions of the line are operating that do not exhaust to the atmosphere. Accordingly, 3M asks that this be revised as follows: "The thermal oxidizer for VOC control shall be in operation at all times when the Extrusion Line is in operation and the extractor is operating." Please also make a similar change to Condition D.4.3.

Response 8

IDEM believes that if there is indoor venting some emissions might still escape to the atmosphere unless the system is tested and proven to be 100% enclosure. In this case, 3M and IDEM have not performed such testing. In addition, D.4.3(a) required the use of a thermal oxidizer as a BACT requirement pursuant to 326 IAC 8-1-6 and CP 009-5147-00004 issued on June 4, 1996. Therefore, no change has been made as a result of the comment.

Comment 9

Condition D.5.1(b). Please delete this item, as there is not a regulation nor an underlying permit requirement that limits percent sulfur. The potential sulfur dioxide emissions from each boiler is 0.05 pound per MMBtu heat input, which is below the sulfur dioxide limit as listed in D.5.1(2).

Response 9

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) applies to all facilities with a potential to emit greater than twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. The three (3) boilers (EU008, EU009, and EU010), with individual maximum heat capacities of 12.553 MMBtu per hour (37.66 MMBtu per hour total), are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) since each boiler has a potential to emit SO_2 at 25 tons per year. Therefore, pursuant to this rule:

(1) The combined SO_2 emissions from the three (3) boilers shall be limited to five-tenths (0.5) pound per million Btu for fuel oil combustion.

(2) The maximum fuel oil sulfur content shall be limited to 0.24 % sulfur by weight.

To render the requirements of 326 IAC 2-2 (PSD) not applicable, condition D.5.1(b) is necessary. Due to its major PSD source status, the three (3) boilers are not allowed to emit over 40 tpy of SO_2 to render the requirements of 326 IAC 2-2 (PSD) not applicable. By limiting the fuel oil sulfur content to 0.24%, the SO_2 emissions will be limited to less than 40 tons per year (tpy) based on 8760 hours per year of operation without setting any limit on the fuel oil usage based on the three (3) boilers' maximum capacities. Therefore, condition D.5.1(b) has not been revised.

Comment 10

Condition D.5.5(a). This condition requires visible emission checks "once per shift" during normal daylight operations. This can be confusing, because sometimes shifts span daylight and nighttime operations, and it is possible that there might be only a half-hour of daylight at the beginning or end of a shift. 3M asks that this be revised to read "once per day" during normal daylight operations . . ." rather than once per shift. Please make the same change to the TSD, in the Compliance Requirements section.

Response 10

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording would allow sporadic use of compliance monitoring, which would not accomplish the purpose of continuous compliance monitoring. Emission unit failure can occur suddenly; therefore monitoring of emission unit operational parameters should be more frequently than weekly or even daily in such cases where a source operates more than one shift per day. The OAQ believes that visible emissions notations once per operating shift are a reasonable requirement. No changes have been made as a result of this comment.

Comment 11

Condition D.5.6(b). As noted above, 3M asks that the requirement for visible emissions and records for the same be changed to once per day during normal daylight operations, rather than once per shift.

Response 11

As explained in Response 10, the OAQ believes that visible emissions notations once per operating shift are a reasonable requirement. No changes have been made as a result of this comment.

Comment 12

Other Changes to the Technical Support Document

In addition to the changes noted above, please make the following additional changes to the Technical Support Document.

Potential to Emit After Issuance - BC-1 Coating Line

1. Please revise the VOC and HAP limit from 834.40 ton VOC/yr to 2800 ton VOC/yr, as Thermal Oxidizer No. 1 is voluntary. In addition, please modify footnote 2 to state "Limited potential to emit based on maximum solvent usages (2800 tpy) as reported by the source." As such, please also modify Appendix A: Emission Calculations for Controlled Potential Emissions (tpy) and HAP Emission Calculations accordingly.

Potential to Emit After Issuance - Storage Tanks

1. Please revise the tanks as listed in the column to read "Storage Tanks (T001 – T007, T011). In addition please revise the VOC and Total HAP emissions accordingly to read 1.982 ton VOC/yr and 1.98 ton HAPs/yr as recalculated in the most recent version of the Title V Application revised on 09/24/03. As such, please also modify Appendix A: Emission Calculations, Controlled Potential Emissions (tpy) accordingly.

Federal Rule Applicability

1. In section (c)(4), please delete the reference to storage tank T001 and T002 in the middle of that paragraph—the information in this paragraph conflicts with the information for tank T001 in Section (c)(1) and tank T002 in the beginning of the paragraph.

Response 12

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

The Potential to Emit After Issuance Table on Page 7 of 25 of the TSD has been amended in this addendum as follows:

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Worst Case Single HAPs	Total HAPs
BA Coating Line	0.00	0.00	0.00	251.50(1)	0.00	0.00	251.50(1)	251.50
BC-1 Coating Line	0.00	0.00	0.00	~~834.40~~ **2800**(2)	0.00	0.00	~~834.40~~ **2800**(2)	834.40
BC-2 Coating Line	0.00	0.00	0.00	485.00(3)	0.00	0.00	485.00(3)	485.00
VCS Coating Line	0.00	0.00	0.00	9.20(4)	0.00	0.00	9.20(4)	9.20
PTFE Extrusion Line	0.00	0.00	0.00	14.00(5)	0.00	0.00	0.00	0.00
Compounding	0.00	0.00	0.00	3.30	0.00	0.00	3.69	3.69
Storage Tanks ~~(T001 T003, T006 T011)~~ **(T001 – T007, T011)**	0.00	0.00	0.00	~~3.10~~ **1.98**	0.00	0.00	1.21	~~2.97~~ **1.98**
Boilers (#1,2,3)	2.40	1.30	<25.0	0.90	19.75	23.60	0.00	0.00
Thermal Oxidizers	0.40	1.50	0.10	1.10	16.60	19.70	0.00	0.00
Total Emissions	2.80	2.80	83.80	1602.50	36.31	43.30	1585.00	1586.76

Notes:

1. Pursuant to construction permit CP-009-3871-00004, issued on July 14, 1995, the throughput was limited to 1006 tpy and after 75% control of the thermal oxidizer the limited potential to emit of VOC was equal to 251.5 tpy. Also, since 3M wanted to keep the components of their coating mixture confidential, the worst case HAP was assumed to be equal to VOC emissions.
2. Limited potential to emit based on the maximum solvent usages (2800 tpy) as reported by the source~~., and a control efficiency of 70.20% for the thermal oxidizer.~~
3. Based on operating condition D.1.1 of construction permit CP-009-9364-00004, issued on July 10, 1998. Also, since 3M wanted to keep the components of their coating mixture confidential, the worst case HAP was assumed to be equal to VOC emissions.
4. VCS coating line emissions are based on construction permit CP-009-3127-00004, issued on March 7, 1994.
5. PTFE extrusion line emissions are based on construction permit, CP-009-5147-00004, issued on June 4, 1996.

Changes have also been made in the calculation spreadsheets.

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Item c(4) on Page 11 of 25 of the TSD has been amended in this addendum as follows:

(4) Storage tanks T002, T004, T005, T007 and T011 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because the tanks were constructed in 1997, 1997, 1997, 1992 and 1991, respectively, and the storage capacity of each tank is less than 40 cubic meters for Kb. ~~The storage tanks T001 and T002 are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.110, 110a and 110b, Subparts K, Ka and Kb), because both these tanks were constructed in 1957, prior to the earliest applicability date of June 11, 1973 for Subpart K, Ka and Kb.~~

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit. Bolded language has been added and the language with a line through it has been deleted.

1. Condition D.1.1 has been changed as follows:

D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the BA Coating Line, except when otherwise specified in 40 CFR Part 63, Subpart JJJJ. ~~These requirements become applicable to this facility on December 5, 2005.~~ **The Permittee must comply with these requirements on and after the effective date, which is December 4, 2002, of the National Emission Standards or Hazardous Air Pollutants: Paper and Other Web Surface Coating.**

(b) **Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.**

Similar changes have been made to conditions D.2.1, D.3.1 and D.4.1.

2. Condition D.1.2 has been changed as follows:

D.1.2 **National Emissions Standards for Hazardous Air Pollutants for** Paper and Other Web ~~(~~Surface Coating~~) NESHAP Requirements~~ [40 CFR Part 63**.3280**, Subpart JJJJ] [326 IAC 20]

(a) ~~The BA Coating Line shall comply with, the requirements of Subpart JJJJ. The Permittee shall comply with such requirements as they exist on December 5, 2005, the compliance date for this existing affected facility.~~ **The paper coating affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web (Surface Coating) (40 CFR Part 63, Subpart JJJJ), effective and published in Federal Register on December 4, 2002. A copy of this rule is available on the U.S. EPA Air Toxics website, http://www.epa.gov/ttn/atw/powc/powcpg.html. Pursuant to this rule, the Permittee must comply with Subpart JJJJ by December 5, 2005, or accept and meet an enforceable HAP emissions limit below the major source threshold prior to December 5, 2005.**

(b) ~~In order to incorporate the requirements of Subpart JJJJ into the Part 70 permit, the Permittee shall apply for a Significant Permit Modification when the Emission Standard Option, 40 CFR 63.3320(b)(1), (2), (3) or (4), has been determined for the BA Coating Line. The permittee shall submit such application no later than nine (9) months before the compliance date, which is December 5, 2005.~~ **Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.**

(c) The following emissions units comprise the affected source that is subject to 40 CFR 63, Subpart JJJJ:

One (1) BA Coating Line, identified as EU001, constructed in 1963, consisting of the following equipment:

Two (2) coating stations (coating stations 1 and 2), installed in 1963, and one (1) coating station (coating station 3), installed in 1995, each applying coatings with methods including, but not limited to, gravure, reverse roll, extrusion die, hopper/knife, and/or slot die, utilizing thermal oxidizer No. 2, identified as C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

(d) The definitions of 40 CFR 63, Subpart JJJJ at 40 CFR 63.3310 are incorporated by reference.

Similar changes have been made to conditions D.2.2, D.3.2 and D.4.2.

3. Condition D.1.11 has been removed from the Part 70 Permit:

~~D.1.11 Reporting Requirements [40 CFR 63, Subpart JJJJ]~~

~~(a) The permittee shall submit an initial notification as required by §63.9(b) no later than December 5, 2004 pursuant to §63.3400(b)(1).~~

~~(b) The permittee shall submit a notification of Compliance status no later than August 2, 2006 pursuant to §63.3400(e) and §63.9(h).~~

Similarly Conditions D.2.11, D.3.12 and D.4.12 have been removed.

4. New Conditions D.1.11 and D.1.12 have been added as as follows:

D.1.11 Notification Requirements [40 CFR 63.3400] [326 IAC20]

(d) General. The Permittee must submit the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the Permittee by the dates specified in those sections, except as provided in 40 CFR 63.3400, paragraphs (b), (d) and (e).

(b) Initial Notification. The Permittee must submit an Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than December 5, 2004.

(c) Notification of Intent to Conduct a Performance Test. The Permittee must submit a notification of intent to conduct a performance test as specified in 40 CFR 63.9(e), at least 60 calendar days before the performance test is scheduled to begin, but no later than April 4, 2006.

(d) Notification of Compliance Status. The Permittee must submit the a Notification of Compliance Status as specified in 40 CFR 63.9(h) no later than August 2, 2006.

(e) The notifications required by paragraphs (a) through (d) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.12 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Title V permit.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart JJJJ, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than nine (9) months prior to the compliance date, which is December 5, 2005

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Similarly Conditions D.2.11, D.2.12, D.3.12, D.3.13, D.4.12 and D.4.13 have been added.

5. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Item (i) on Page 12 of 25 of the TSD has been amended in this addendum as follows:

(i) This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Paper and Other Web (Surface Coating), 40 CFR 63.3280 (Subpart JJJJ). The provisions of this Subpart apply to each new and existing facility that is a major source of HAP, as defined in 40 CFR 63.2, Subpart A, at which web coating lines are operated. All the coating lines for this source, identified as a major source of HAP, are web coating lines. Therefore, the requirements of this rule apply to this source. All the facilities for this source

were constructed before September 13, 2000, therefore it is an existing affected source. This rule requires the source to comply with all applicable requirements in accordance with the schedule presented at 40 CFR 63.3330.

Since the compliance date of the rule has not passed and the Permittee has not chosen the method of compliance with Subpart JJJJ, the detailed requirements of the NESHAP will not be included in this approval. Rather, this permit will state that all affected source operations and equipment, including web coating lines EU001, EU002, EU003, EU004 and EU005, are subject to the requirements of 40 CFR 63, Subpart JJJJ and will require the source to comply with those requirements as they exist as of May 5, 2005. This approval will also include a condition requiring the Permittee to apply for a Significant Permit Modification when the Emission Standard Option, 40 CFR 63.3320(b)(1), (2) (3) or (4), has been determined for this source. The permittee shall submit such application no later than ~~the Notification of Compliance Status is due [40 CFR 63.3400(e) and 40 CFR 63.9(h)]~~ **nine (9) months before the complinacve date, which is December 5, 2005**. An initial notification condition will also be added to the permit pursuant to 40 CFR 63.3400(b) (1).

Prior to the final promulgation of Subpart JJJJ on December 4, 2002, the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) were applicable to this source. The Permittee submitted the requisite Part 1 MACT Application on May 15, 2002, on the May 15, 2002 reporting deadline. Notwithstanding the Part 1 application, the Permittee is required to comply with an applicable MACT standard that is promulgated prior to the Section 112(j) MACT deadline for a Part 2 MACT application [40 CFR 63.52(a)]. Since such deadline has not occurred, the Section 112(j) requirements no longer apply to this source and are instead replaced by the requirements of 40 CFR 63, Subpart JJJJ.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: **3M**
Source Location: **304S 075E, Hartford City, Indiana 47348**
County: **Blackford**
SIC Code: **2672, 3081**
Operation Permit No.: **T009-7712-00004**
Permit Reviewer: **Seema Roy / EVP**

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from 3M relating to the operation of a tapes, labels and extruded web manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) BA Coating Line, identified as EU001, constructed in 1963, consisting of the following equipment:

Two (2) coating stations (coating stations 1 and 2), installed in 1963, and one (1) coating station (coating station 3), installed in 1995, each applying coatings with methods including, but not limited to, gravure, reverse roll, extrusion die, hopper/knife, and/or slot die, utilizing thermal oxidizer No. 2, identified as C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

(b) One (1) BC-1 Coating Line, identified as EU002, constructed in 1963, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, pressure fed die, gravure, curtain and/or fluid bed, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V 888-001;

(c) One (1) BC-2 Coating Line, identified as EU003, consisting of the following equipment:

One (1) coating station, installed in 1963, applying coatings with methods including, but not limited to, wrap cast, reverse roll, gravure, and/or reverse gravure, utilizing thermal oxidizer No. 1, identified as C001, for volatile organic compound (VOC) control, exhausting to stack S/V888-001. This Coating Line was changed as per a permit issued on July 10, 1998;

(d) One (1) VCS Coating Line, identified as EU004, constructed in 1994, consisting of the following equipment:

(1) One (1) compounding room, constructed in 1994, exhausting to stack S/V 001-001;

(2) One (1) coating station, installed in 1994, applying coatings with methods including, but not limited to, reverse roll, gravure, reverse gravure, flexographic, and/or pressure fed die methods, utilizing thermal oxidizer No. 1, C001, for volatile

organic compound (VOC) control, exhausting to stack S/V 888-001;

(e) One (1) Polytetrafluoroethylene (PTFE) extrusion line, identified as EU005, constructed in 1996, consisting of one (1) extruder, calendar rolls, and one (1) oven, utilizing thermal oxidizer No. 2, C002, for volatile organic compound (VOC) control, exhausting to stack S/V 888-002;

(f) One (1) compounding/mix & mill area, identified as EU007, containing a variety of mixing vessels, each constructed between 1957-1995, used for mixing in the compounding area;

(g) Three (3) boilers, identified as EU008, EU009, and EU010, each constructed in 1986, each with a maximum heat input capacity of 12.553 MMBtu per hour, each combusting natural gas and No.2 Fuel Oil, exhausting to stacks S/V 001-005, 001-006, and 001-007, respectively;

(h) Six (6) outdoor bulk storage tanks, identified as T001, T003, T006, T008, T009 and T012, each constructed in 1988, 1976, 1986, 1999, 1985 and 2000, respectively, each with a maximum tank capacity of 30,000, 20,000, 30,000, 275, 275 and 275 gallons, respectively, each containing volatile organic liquids with maximum true vapor pressure less than 15.0 kPa; and

(i) Four (4) indoor bulk storage tanks, identified as T002, T004, T005, and T007, each constructed in 1997, 1997, 1997, and 1992, respectively, each with a maximum tank capacity of 300, 300, 300 and 7500 gallons, respectively, each containing volatile organic liquids with maximum true vapor pressure less than 15.0 kPa, and a fifth indoor tank, To11, constructed in 1991, with a maximum tank capacity of 1500 gallons, inactive at the time of issuance of the permit but with the potential for holding volatile organic liquids with maximum true vapor pressure less than 15.0 k Pa.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:

(1) Pre coat oven zones and oven zones, located in the BA Coating Line;

(2) Oven zones, located in the BC-1 Coating Line;

(3) Oven zones, located in the BC-2 Coating Line;

(4) Oven zones, located in the VCS Coating Line; and

(5) Heaters, located in the PTFE Extrusion Line;

(b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu per hour;

(c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;

(d) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons; and

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;

(e) Filling drums, pails, or other packaging containers with lubricating oils, waxes, and greases;

(f) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;

(g) Machining where an aqueous cutting coolant continuously floods the machining interface;

(h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-2] [326 IAC 8-3-5];

(i) Cleaners and solvents characterized as follows:

(1) Having a vapor pressure equal to or less than 2 kPa; 15 mmHg; or 0.3 psi measured at 38 degrees Celsius; or

(2) Having a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 degrees Celsius.

The use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;

(j) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2(e)];

(k) Closed loop heating and cooling systems;

(l) Infrared cure equipment;

(m) Exposure chambers for curing of ultraviolet inks and ultraviolet coatings where heat is the intended discharge;

(n) Any operations using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs;

(o) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;

(p) Noncontact cooling tower systems with a forced and induced draft cooling tower system not regulated under NESHAP;

(q) Heat exchanger cleaning and repair;

(r) Process vessels degassing and cleaning to prepare for internal repairs;

(s) Trimmers that do not produce fugitive emissions that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2(e)];

(t) Paved and unpaved roads and parking lots with public access [326 IAC 6-4-3];

(u) Asbestos abatement projects regulated by 326 IAC 14-10;

(v) Equipment used to collect any material that might be released during malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;

(w) Blowdown of any of the following: sight glass, boiler, compressors, pumps, and cooling tower;

(x) On-site fire and emergency response training approved by the department;

(y) Diesel generators not exceeding 1600 horsepowers;

(z) Stationary fire pump;

(aa) Purge double block and bleed valves;

(bb) Filter or coalescer media changeout;

(cc) A laboratory defined in 326 IAC 2-7-1(20)(c);

(dd) Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP:

(1) Converting area printers;

(2) Safety Kleen degreaser;

(3) Facility cleaning operations;

(ee) Activities with emission equal to or less than the following threshold:

Pb = 0.6 tons per year or 3.29 pounds per day;

SO_2 = 5 pounds per hour or 25 pounds per day;

NOx = 5 pounds per hour or 25 pounds per day;

CO = 25 pounds per day;

PM = 5 pounds per hour or 25 pounds per day;

VOC = 3 pounds per hour or 15 pounds per day.

(1) Particulate emissions from the thermal oxidizer during a thermal oxidizer

malfunction lasting up to 60 minutes; and

(2) Corona treaters.

(ff) One (1) coating solution room exhausting to stack S/V 002-001.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP-05-05-88-0055, issued on January 24, 1985;

(b) OP-05-05-88-0056, issued on January 24, 1985;

(c) OP-05-05-88-0057, issued on January 24, 1985;

(d) Registered Construction and Operation Status, issued on August 28, 1986;

(e) CP-009-3871-00004, issued on July 14, 1995;

(f) Amendment 009-6915-00004, issued on November 12, 1996;

(g) CP-009-3127-00004, issued on March 7, 1994;

(h) Amendment to CP-009-3127-00004, issued on June 13, 1994;

(i) CP-009-5147-00004, issued on June 4, 1996;

(j) Registration No. CP-009-2413-00004, issued on April 20, 1992;

(k) Registration No. CP-009-2810-00004, issued on January 21, 1993; and

(l) CP-009-9364-00004, issued on July, 10, 1998.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 13, 1996. Additional information has been received throughout this permit review, through May 2003.

A notice of completeness letter was mailed to the source on January 24, 1997.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Pages 1-13).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	greater than 250
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Toluene	greater than 10
Methanol	greater than 10
Methyl Ethyl Ketone	greater than 10
N-Hexane	greater than 10
Formaldehyde	greater than 10
Benzene	greater than 10
Ethyl Benzene	greater than 10
Methyl Isobutyl Ketone	greater than 10
Xylene	greater than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.00
PM-10	0.00
SO_2	2.00
VOC	56.0
CO	6.00
Pb	0.00
NO_x	10.00
Toluene	not reported
MEK	not reported
MIBK	not reported
Xylene	not reported
Formaldehyde	not reported

Potential to Emit After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_x	Worst Case Single HAPs	Total HAPs
BA Coating Line	0.00	0.00	0.00	251.50[(1)]	0.00	0.00	251.50[(1)]	251.50
BC-1 Coating Line	0.00	0.00	0.00	834.40[(2)]	0.00	0.00	834.40[(2)]	834.40
BC-2 Coating Line	0.00	0.00	0.00	485.00[(3)]	0.00	0.00	485.00[(3)]	485.00
VCS Coating Line	0.00	0.00	0.00	9.20[(4)]	0.00	0.00	9.20[(4)]	9.20
PTFE Extrusion Line	0.00	0.00	0.00	14.00[(5)]	0.00	0.00	0.00	0.00
Compounding	0.00	0.00	0.00	3.30	0.00	0.00	3.69	3.69
Storage Tanks (T001-T003, T006-T011)	0.00	0.00	0.00	3.10	0.00	0.00	1.21	2.97
Boilers (#1,2,3)	2.40	1.30	<25.0	0.90	19.75	23.60	0.00	0.00
Thermal Oxidizers	0.40	1.50	0.10	1.10	16.60	19.70	0.00	0.00
Total Emissions	2.80	2.80	83.80	1602.50	36.31	43.30	1585.00	1586.76

Notes:

1. Pursuant to construction permit CP-009-3871-00004, issued on July 14, 1995, the throughput was limited to 1006 tpy and after 75% control of the thermal oxidizer the limited potential to emit of VOC was equal to 251.5 tpy. Also, since 3M wanted to keep the components of their coating mixture confidential, the worst case HAP was assumed to be equal to VOC emissions.
2. Limited potential to emit based on the maximum solvent usages (2800 tpy) as reported by the source, and a control efficiency of 70.20% for the thermal oxidizer.
3. Based on operating condition D.1.1 of construction permit CP-009-9364-00004, issued on July 10, 1998. Also, since 3M wanted to keep the components of their coating mixture confidential, the worst case HAP was assumed to be equal to VOC emissions.
4. VCS coating line emissions are based on construction permit CP-009-3127-00004, issued on March 7, 1994.
5. PTFE extrusion line emissions are based on construction permit, CP-009-5147-00004, issued on June 4, 1996.

County Attainment Status

The source is located in Blackford County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Blackford County has been designated as attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Blackford County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) New Source Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR) is applicable to the following facilities:

(1) The affected facility to which the provisions of this subpart apply is each coating line used in the manufacture of pressure sensitive tape and label materials.

(2) Any affected facility which inputs to the coating process 45 Mg (50 tons) of VOC or less per 12 month period is not subject to the emission limits of subpart 60.442(a), however, the affected facility is subject to the requirements of all other applicable sections of this subpart. If the amount of VOC input exceeds 45 Mg (50 tons) per 12 month period, the coating line will become subject to subpart 60.442(a) and all other sections of this subpart.

(3) This subpart applies to any affected facility which begins construction, modification, or reconstruction after December 30, 1980.

(A) The VCS Coating Line consisting of one (1) compounding room and one (1) coating station, constructed in 1994, is subject to this rule because both pieces of equipment for this coating line were constructed after the December 30, 1980 rule applicability date. Therefore, pursuant to this rule the owner/operator of the source shall either discharge no greater than 0.2 kg VOC/kg of coating solids applied or attain 90% overall VOC emission reduction. Pursuant to CP-009-3127-00004, issued on March 7, 1994, the source has chosen to comply with this rule by:

(i) Using a thermal oxidizer (minimum of 90% overall destruction efficiency), whenever the solvent-based coating solution is used, or

(ii) Not to discharge greater than 0.2 kg VOC/kg of coating solids applied whenever the water-based coating solution is used.

(B) BA Coating Line is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR) because of the following reasons:

(i) The BA Coating Line was originally constructed in 1963 (prior to the applicability date of December 30, 1980);

(ii) The changes to the BA Coating Line do not constitute a reconstruction because the fixed cost of the new equipment does not exceed 50% of the fixed capital cost required to construct an entirely new facility; and

(iii) The changes to the BA Coating Line do not constitute a modification. The NSPS modification provisions of 40 CFR 60.14 apply when a physical or operational change occurs which could result in an increase in the hourly potential emissions, unless such change qualifies for one of the exemptions at 40 CFR 60.14(e). The emission rate before and after a physical or operational change is evaluated by comparing the hourly potential emissions under maximum capacity immediately before the change to emissions at maximum capacity after the change. Under the General Provisions of the NSPS, only physical limitations on maximum capacity are considered in determining potential emissions. 3M has provided with adequate evidence to IDEM that there was a decrease in the hourly potential emissions based on the maximum capacity, as a result of the 1995 changes made to the BA Coater. The changes made to the BA Coater in 1995 decreased the maximum exhaust flow rate, thereby decreasing the potential VOC emissions from 2,332 lbs/hr to 752 lbs/hr.

(C) BC-1 Coating Line is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR), because none of the equipment for this coating line was constructed, reconstructed, or modified after the December 30, 1980 rule applicability date.

(D) BC-2 Coating Line is not subject to the requirements of the New Source

Performance Standard, 326 IAC 12, (40 CFR 60.440, Subpart RR) because pursuant to CP-009-9364-00004, issued on July 10, 1998:

(i) The BC-2 Coating Line was originally constructed in 1963 (prior to the applicability date of December 30, 1980);

(ii) The changes to the BC-2 Coating Line do not constitute a reconstruction because the fixed cost of the new equipment does not exceed 50% of the fixed capital cost required to construct an entirely new facility; and

(iii) The changes to the BC-2 Coating Line do not constitute a modification. The NSPS modification provisions of 40 CFR 60.14 apply when a physical or operational change occurs which could result in an increase in the hourly potential emissions, unless such change qualifies for one of the exemptions at 40 CFR 60.14(e). The emission rate before and after a physical or operational change is evaluated by comparing the hourly potential emissions under maximum capacity immediately before the change to emissions at maximum capacity after the change. Under the General Provisions of the NSPS, only physical limitations on maximum capacity are considered in determining potential emissions. There was no change to the maximum capacity or hourly potential emissions based on the maximum capacity, as a result of the 1998 changes made to the BC-2 Coater.

(b) The three (3) boilers (EU008, EU009, EU010) are not subject to New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc). The affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr). The three (3) boilers were constructed in 1986, prior to the June 9, 1989 rule applicability date, and therefore they are not subject to the requirements of this rule.

(c) New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110, Subpart K) is applicable to any facility which:

(1) Has a capacity greater than 151,416 liters (40,000) gallons), but not exceeding 246,052 liters (65,000) gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978.

(2) Has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978.

New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110a, Subpart Ka) is applicable to each storage vessel with a storage capacity greater than 151, 416 liters (40, 000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978.

New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) is applicable to each storage vessel with a capacity greater than or equal to 40 cubic meters that is used to store volatile organic liquids (VOL's) for which construction, reconstruction,

or modification is commenced after July 23, 1984.

(1) The storage tanks T001 and T006 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110 and 110a, Subparts K and Ka) because the tanks were constructed in 1988 and 1986, respectively, and the storage capacity of each tank is less than 40,000 gallons.

Storage tanks T001 and T006 with maximum tank capacity of 30,000 gallons each, are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" since the tanks were constructed after July 23, 1984, and have a storage capacity greater than 40 cubic meters each. However, since the tanks have a storage capacity greater than 75 cubic meters each, but less than 151 cubic meters each, and the liquid stored in the tanks has a maximum true vapor pressure of less than 15.0 kPa, they are not subject to 40 CFR 116b paragraph (c). Also, because the liquid stored in the tanks has a maximum true vapor pressure less than 27.6 kPa, they are not subject to the requirements of 40 CFR 60.112b paragraphs (a) or (b). The tanks are subject to only 40 CFR Part 60.116b, paragraphs (a) and (b) which require record keeping.

(2) Storage tanks T003 is not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because it was constructed in 1976, prior to the rule applicability date of July 23, 1984 for Kb, and because the storage capacity of the tank is less than 40,000 gallons for K and Ka.

(3) Storage tanks T008, T009, and T012 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because the tanks were constructed in 1999, 1985 and 2000, respectively, and the storage tank capacity of each tank is less than 40 cubic meters for Kb.

(4) Storage tanks T002, T004, T005, T007 and T011 are not subject to New source Performance Standard, 326 IAC 12 (40 CFR 60.110, 110a, and 110b, Subparts K, Ka and Kb) because the tanks were constructed in 1997, 1997, 1997, 1992 and 1991, respectively, and the storage capacity of each tank is less than 40 cubic meters for Kb. The storage tanks T001 and T002 are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.110, 110a and 110b, Subparts K, Ka and Kb), because both these tanks were constructed in 1957, prior to the earliest applicability date of June 11, 1973 for Subpart K, Ka and Kb.

(d) This source is not subject to New Source Performance Standard, 326 IAC 12, (40 CFR 60.430, Subpart QQ) because the affected facility to which the provisions of this subpart apply is a publication rotogravure printing press. This source does not use a publication rotogravure printing press.

(e) The parts degreasing operation that includes wash tanks with capacities each less than 145 gallons, as an insignificant activity, is not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 20, (40 CFR 63, Subpart T). Subpart T applies to degreasing operations using one of six listed halogenated solvents, or any combination of the solvents in a concentration greater than 5 percent by weight, as a cleaning or drying agent. This source does not use the regulated halogenated solvents in the degreasing operation; therefore, Subpart T does not apply.

(f) This source is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.701, Subpart EE. The provisions of this subpart apply to each new and existing magnetic tape manufacturing operation located at a major source of hazardous air pollutant (HAP) emissions. This source does not have any magnetic tape manufacturing operations.

(g) This source is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63.820, Subpart KK. The provisions of this subpart apply to each new and existing facility that is a major source of hazardous air pollutant (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated. This source does not have publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses.

(h) The United States Environmental Protection Agency (US EPA) has established the *Miscellaneous Organic Chemical Manufacturing (MON)* source category as requiring hazardous air pollutant control. The U.S. EPA proposed such requirements on April 4, 2002. As proposed, this rule, codified as 40 CFR 63, Subpart FFFF, will be applicable to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2. As currently proposed, this rule will not apply to this source because this rule does not apply to an affected source under another subpart of 40 CFR 63 and this source is subject to National Emission Standards for Hazardous Air Pollutants (NESHAPs), Paper and Other Web (Surface Coating), 40 CFR 63.3280 (Subpart JJJJ).

(i) This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Paper and Other Web (Surface Coating), 40 CFR 63.3280 (Subpart JJJJ). The provisions of this Subpart apply to each new and existing facility that is a major source of HAP, as defined in 40 CFR 63.2, Subpart A, at which web coating lines are operated. All the coating lines for this source, identified as a major source of HAP, are web coating lines. Therefore, the requirements of this rule apply to this source. All the facilities for this source were constructed before September 13, 2000, therefore it is an existing affected source. This rule requires the source to comply with all applicable requirements in accordance with the schedule presented at 40 CFR 63.3330.

Since the compliance date of the rule has not passed and the Permittee has not chosen the method of compliance with Subpart JJJJ, the detailed requirements of the NESHAP will not be included in this approval. Rather, this permit will state that all affected source operations and equipment, including web coating lines EU001, EU002, EU003, EU004 and EU005, are subject to the requirements of 40 CFR 63, Subpart JJJJ and will require the source to comply with those requirements as they exist as of May 5, 2005. This approval will also include a condition requiring the Permittee to apply for a Significant Permit Modification when the Emission Standard Option, 40 CFR 63.3320(b)(1), (2) (3) or (4), has been determined for this source. The permittee shall submit such application no later than the Notification of Compliance Status is due [40 CFR 63.3400(e) and 40 CFR 63.9(h)]. An initial notification condition will also be added to the permit pursuant to 40 CFR 63.3400(b)(1).

Prior to the final promulgation of Subpart JJJJ on December 4, 2002, the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) were applicable to this source. The Permittee submitted the requisite Part 1 MACT Application on May 15, 2002, on the May 15, 2002 reporting deadline. Notwithstanding the Part 1 application, the Permittee is required to comply with an applicable MACT standard that is promulgated prior to the Section 112(j) MACT deadline for a Part 2 MACT application [40 CFR 63.52(a)].

Since such deadline has not occurred, the Section 112(j) requirements no longer apply to this source and are instead replaced by the requirements of 40 CFR 63, Subpart JJJJ.

40 CFR 64 Compliance Assurance Monitoring

(a) This Part 70 source does include a pollutant-specific emissions unit as defined in 40 CFR 64.1 for VOC, xylene, toluene, n-hexane, ethyl benzene, methanol, MEK, and MIBK:

(1) With the potential to emit before controls equal to or greater than the major source threshold for VOC, xylene, toluene, n-hexane, ethyl benzene, methanol, MEK, and MIBK;

(2) That is subject to an emission limitation or standard for VOC, xylene, toluene, n-hexane, ethyl benzene, methanol, MEK, and MIBK; and

(3) That uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

(b) The pollutant-specific emission unit, as the BA, BC-1, BC-2, VCS and PTFE Coating Lines, are each a “large unit” as described in 40 CFR 64.5. However, each Coating Line is subject to the MACT standards of 40 CFR 63, and pursuant to 40 CFR 64.2(b)(1)(i), these units are exempt from the requirements of 40 CFR 64. Therefore, this rule does not apply to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on November 5, 1996. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-2 (Prevention of Significant Deterioration, PSD)

The source was initially constructed in 1957, prior to the August 7, 1977 rule applicability date. Pursuant to 326 IAC 2-2 (PSD), this source is a major stationary source since it is not one of the 28 listed source categories and it has the potential to emit greater than 250 tons per year (tpy) of VOC. The source had several modifications after the August 7, 1977 rule applicability date, none of which is a major modification pursuant this rule for the following reasons:

(a) The three (3) No. 2 Fuel Oil fired boilers, each constructed in 1986, did not trigger PSD applicability. The NOx emissions from each of the three (3) boilers are equal to 7.9 tpy, or 23.7 tpy (combined), when burning No.2 Fuel Oil, and this is less than the PSD major modification significant emission rate threshold for NOx (as NO_2) of 40 tpy. Pursuant to Registered Construction and Operation Status, issued on August 28, 1986, the combination of the quantity and sulfur content of the No. 2 fuel oil used for the three (3) boilers shall be such that combined sulfur dioxide emissions from the three (3) boilers do not exceed 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This is less than the PSD major modification significant emission rate threshold for SO_2 of 40 tpy. Therefore, the construction of the three boilers was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). Registrations are not enforceable. However, this Part 70 permit will make the 326 IAC 2-2 limits enforceable.

(b) Pursuant to CP-009-3127-00004, issued on March 7, 1994, the VCS Coating Line did not trigger PSD applicability. The controlled potential to emit VOC from this facility is equal to 9.20 tpy, after enforceable controls utilizing a thermal oxidizer for VOC emission control. This is less than PSD major modification significant emission rate threshold for VOC of 40 tpy. Therefore, the installation of VCS coating line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(c) Pursuant to CP-009-3871-00004, issued on July 14, 1995, the modification of the BA Coating Line did not trigger PSD applicability. This modification was not a major modification pursuant to 326 IAC 2-2 because the source agreed to limit future actual VOC emissions from the BA Coating Line to no more than 39 tpy above the baseline actual emissions for the existing line. Pursuant to 40 CFR 52.21(B)(21) and 326 IAC 2-2-1(b), actual emissions are generally defined in terms of the two (2) year period preceding a modification when such time-frame represents normal operations. However, the same definition provides for the use of a different 2-year period if such is more representative of normal source operations. During the permit review process for CP009-3871, 3M provided information to IDEM to show that the BA Coater did not have actual emissions reflective of normal operations during any 2-year period after 1990, and that the proposed modification would result in more normal, pre-1990, operations. As such, IDEM, OAQ, agreed that the 2-year period, 1989-1990, would represent normal operations and the related average actual emission rate was determined as 967 tons VOC per year. For the BA Coating Line modification, the total VOC emission rate was limited to 967 tpy, plus 39 tpy, or 1,006 tpy. Therefore, the modification of the BA Coating Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). This emission limit notwithstanding, the source also decided to use a thermal oxidizer on the BA Coating line with a VOC control efficiency (capture/destruction) of 75% after the modification. Therefore, the PTE for the BA Coating Line modification, after the installation of thermal oxidizer and in conjunction with VOC usage limit of 1006 tpy, was 252 tpy.

(d) Pursuant to CP-009-5147-00004, issued on June 4, 1996, the PTFE Extrusion Line did not trigger PSD applicability. The controlled potential to emit VOC from this facility is equal to 14 tpy, after enforceable controls utilizing a thermal oxidizer for VOC emission control. This is less than PSD major modification significant emission rate threshold for VOC of 40 tpy. Therefore, the installation of PTFE Extrusion Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(e) Pursuant to CP-009-9364-00004, issued on July 10, 1998, the modification of the BC-2 Coating Line did not trigger PSD applicability. This modification was not a major modification pursuant to 326 IAC 2-2 because this source agreed to limit future VOC emissions from the BC-2 Coating Line to no more than 39 tpy above the baseline actual emissions for the line. Pursuant to 40 CFR 52.21(B)(21) and 326 IAC 2-2-1(b), actual emissions are generally defined in terms of the two (2) year period preceding a modification when such time-frame represents normal operations. However, the same definition provides for the use of a different 2-year period if such is more representative of normal source operations. During the permit review process for CP009-9364, 3M provided information to IDEM to show that the BC-2 Coater did not have actual emissions reflective of normal operations during any 2-year period after 1993, and that the proposed modification would result in more normal, pre-1993, operations. As such, IDEM, OAQ, agreed that the 2-year period, 1992-1993, would represent normal operations and the related average actual emission rate was determined as 446 tons VOC per year. For the BC-2 Coating Line modification, the total VOC emission rate was limited to 446 tpy, plus 39 tpy, or 485 tpy. Therefore, the modification of the BC-2 Coating Line was not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE of 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

All the emission units and pollution control equipment for this source were constructed before the July 27, 1997 rule applicability date. Therefore the requirements of this rule do not apply to this source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternate Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

(a) This rule establishes limitations for sources of indirect heating, receiving permits to construct on or after September 21, 1983. The three (3) No. 2 fuel oil fired boilers, identified as EU008, EU009 and EU010, each with a maximum heat input capacity of 12.553 million Btu per hour (MMBtu/hr), are subject 326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating specified in 326 IAC 6-2-1(d)), because they were all constructed at the same time, in 1986, after the September 21, 1983 rule applicability date.

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from each of the three (3) boilers, based on a total heat input rate of 37.66 MMBtu per hour, shall be limited to 0.42 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = Pounds of particulate matter emitted per MMBtu heat input.
Q = Total source maximum operating capacity rating in MMBtu per hour.
Q = 37.66 MMBtu/hr

$$Pt = \frac{1.09}{} = 0.42 \text{ pound per MMBtu heat input.}$$

$(37.66)^{0.26}$

The potential particulate matter emission from each of the three (3) boilers is 0.002 pound per MMBtu heat input, when burning natural gas. Therefore, these boilers will complywith 326 IAC 6-2-4.

The potential particulate matter emission from each of the three (3) boilers is 0.01 pound per MMBtu heat input, when burning No. 2 Fuel Oil. Therefore, these boilers will comply with 326 IAC 6-2-4.

(b) The oven zones from the BA, BC-1, BC-2, VCS Coating Lines and the heaters from the PTFE Extrusion Line are not subject to 326 IAC 6-2 (Emission Limitations for Sources of Indirect Heating). The oven zones from the BA, BC-1, BC-2, VCS Coating Line and the heaters from the PTFE Extrusion Line are not indirect heating facilities.

326 IAC 6-3-2(e) (Process Operations)

Pursuant to 326 IAC 6-3-2(e), the allowable particulate emissions rate from the welding operation not exempt by 326 IAC 6-3-1 or already regulated by 326 IAC 6-3-2(b) through (d), and which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

This rule applies to all facilities with a potential to emit greater than twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. The three (3) boilers (EU008, EU009, and EU010), with individual maximum heat capacities of 12.553 MMBtu per hour (37.66 MMBtu per hour total), are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) since each boiler has a potential to emit SO_2 at 25 tons per year. Therefore, pursuant to this rule:

(a) The combined SO_2 emissions from the three (3) boilers shall be limited to five-tenths (0.5) pound per million Btu for fuel oil combustion.

(b) The maximum fuel oil sulfur content shall be limited to 0.5 % sulfur by weight.

The maximum fuel oil sulfur content is limited to 0.24% (less than 0.5%) and the potential sulfur dioxide emissions from each boiler is 0.05 pound per MMBtu heat input. Therefore, the source is in compliance with this rule.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

(a) The PTFE Extrusion Line is subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements). Pursuant to CP-009-5147-00004, issued on June 4, 1996, a thermal oxidizer with a minimum combustion chamber temperature of 1400° F, for a minimum overall efficiency of 90%, shall be operated at all times the PTFE Extrusion Line is in operation. This is accepted by OAQ as a Best Available Control Technology (BACT) for this facility. Therefore, the PTFE Extrusion Line complies with this rule.

(b) The BC-1 and BC-2 Coating Lines are not subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements). This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of 25 or more tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). The two (2) Coating Lines were constructed before 1980, therefore, the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply.

(c) The VCS Coating Line is not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because it is subject to the requirements of 326 IAC 8-

2-5 (Paper Coating Operations).

326 IAC 8-2-5 (Paper Coating Operations)

This rule establishes emission limitations for web coating or saturation processes of paper, plastic, metal foil, and pressure sensitive tapes and labels regardless of substrate, not listed in a specific county and constructed after January 1, 1980. Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the volatile organic compound (VOC) content of coatings applied to labels of any substrate, or pressure sensitive tapes, or paper, plastic or metal foil by means of web coating shall be limited to 2.9 pounds VOC per gallon of coating less water delivered to the applicator.

(a) The BA Coating Line is subject to the requirements of 326 IAC 8-2-5 (Paper Coating Operations), because the paper coating operation at the BA Coating Line has 100% saturation, and the third coating station for this Coating Line was installed in 1995, after the January 1, 1980 rule applicability date. Pursuant to 326 IAC 8-2-5 (Paper Coating Operations), the VOC emissions after control shall not be greater than 2.9 pounds per gallon of coating, excluding water. Pursuant to CP-009-3871-00004, issued on July 14, 1995, the source has chosen to comply with this rule by:

(1) Using a thermal oxidizer (minimum of 75% overall destruction efficiency), whenever the solvent-based coating solution is used; and

(2) Not to discharge greater than 2.9 pounds per gallon coating excluding water applies whenever the water-based coating solution is used.

The source has installed a thermal oxidizer and demonstrates compliance with the applicable VOC content limitation by employing a compliance method found in 326 IAC 8-1-2(a)(2) and an equivalent limitation outlined in 326 IAC 8-1-2(b) and (c), as follows:

Pursuant to 326 IAC 8-1-2 (b), the VOC emissions from the BA Coating Line shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, allowed in (a).

This equivalency was determined by the following equation:

$E = L / (1 - (L/D))$

Where:

L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
D= Density of VOC in coating in pounds per gallon of VOC;
E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

$E = 2.9 / (1-(2.9/7.36)) = 4.79$ lb VOC / gallon of solids

Therefore, the pounds of VOC per gallon of coating solids shall be limited to less than 4.79 pounds of VOC per gallon of coating solids as applied.

Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the thermal oxidizer shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
O = Equivalent overall efficiency of the capture system and control device as a percentage.

Based on the information provided by the source the VOC content of the worst case coating used before controls at the BA Coating Line is 4.86 lbs VOC/gal.

Therefore:

V = 4.86 / (1-(4.86/7.36)) = 14.31 lb VOC/gallon of solids

$$O = \frac{14.31 - 4.79}{14.31} \times 100 = 66.5\ \%$$

The overall efficiency of the thermal oxidizer shall not be less than 66.5%. The source is using a thermal oxidizer for the BA Coating Line with a control efficiency of 75%. Therefore, the BA Coating Line complies with 326 IAC 8-2-5 (Paper Coating Operations).

(b) The VCS Coating Line constructed in 1994, applying coatings with methods including, but not limited to gravure, reverse roll, extrusion die, hopper/knife, and/or slot die, is subject to 326 IAC 8-2-5 (Paper Coating Operations), because the paper coating operations at the VCS Coating Line has 100% saturation. The VOC emissions after control shall not be greater than 2.9 pounds per gallon of coating, excluding water. Pursuant to CP-009-3127-00004, issued on March 7, 1994, the source has chosen to comply with this rule by:

(1) Using a thermal oxidizer (minimum of 90% overall destruction efficiency), whenever the solvent-based coating solution is used; and

(2) Not to discharge greater than 2.9 pounds per gallon coating excluding water applies whenever the water-based coating solution is used.

Based on the information presented in CP-009-3127-00004, issued on March 7, 1994, the water based coating solutions for the VCS Coating Line contain negligible volatile organic compounds (VOC) and have VOC content of less than 2.9 pounds per gallon of coating.

The source has installed a thermal oxidizer for solvent based coatings and demonstrates compliance with the applicable VOC content limitation by employing a compliance method found in 326 IAC 8-1-2(a)(2) and an equivalent limitation outlined in 326 IAC 8-1-2(b) and (c), as follows:

Pursuant to 326 IAC 8-1-2 (b), the VOC emissions from the VCS Coating Line shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, allowed in (a).

This equivalency was determined by the following equation:

E = L / (1 - (L/D))

Where:

L= Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating;
D= Density of VOC in coating in pounds per gallon of VOC;
E= Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

E = 2.9 / (1-(2.9/7.36)) = 4.79 lb VOC / gallon of solids

Therefore, the pounds of VOC per gallon of coating solids shall be limited to less than 4.79 pounds of VOC per gallon of coating solids as applied.

Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the thermal oxidizer shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
E = Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
O = Equivalent overall efficiency of the capture system and control device as a percentage.

Based on the information provided by the source the VOC content of the worst case coating used before controls at the VCS Coating Line is 4.86 lbs VOC/gal.

Therefore:

V = 4.86 / (1-(4.86/7.36)) = 14.31 lb VOC/gallon of solids

$$O = \frac{14.31 - 4.79}{14.31} \times 100 = 66.5\ \%$$

The overall efficiency of the thermal oxidizer shall not be less than 66.5%. The source is using a thermal oxidizer for the VCS Coating Line with a control efficiency of 90%. Therefore, the VCS Coating Line complies with 326 IAC 8-2-5 (Paper Coating Operations).

(c) The BC-1 and BC-2 Coating Lines are not subject to 326 IAC 8-2-5 (Paper Coating Operations). The two (2) Coating Lines are located in Blackford County and were constructed prior to the rule applicability date of January 1, 1980, specified in 326 IAC 8-2-1(a)(2).

326 IAC 8-3-2 (Cold Cleaner Operations)

The source, which is located in Blackford County and maintains one (1) cold cleaning parts washer with a capacity less than 145 gallons (i.e., insignificant activities), is subject to the applicable rule requirements since the cleaner was installed after the January 1, 1980 rule applicability date. As such, and pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

This rule applies to all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (thirty-nine thousand (39,000) gallons) containing volatile organic compounds whose true vapor pressure is greater than 10.5 kPa (1.52 psi). Tanks (T001-T011) are not subject to 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) because these petroleum liquid storage vessels have capacities less than 39,000 gallons.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources existing as of January 1, 1980, located in Lake and Marion Counties, as well as to facilities commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. All the facilities for this source, located in Blackford County were either constructed before October 7, 1974 or after January 1, 1980. Therefore, this rule does not apply to this source.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd Counties that emit or have the potential to emit VOCs at levels equal to or greater than 25 tons per year in Lake and Porter Counties; 100 tons per year in Clark and Floyd Counties; and to any coating facility that emits or has the potential to emit 10 tons per year or greater in Lake, Porter, Clark or Floyd County. The source is located in Blackford County. Therefore, this rule is not applicable to this source.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels Applicability):

(a) On and after October 1, 1995, this rule applies to stationary vessels used to store volatile organic liquid (VOL) that are located in Clark, Floyd, Lake, or Porter County.

(b) Stationary vessels with a capacity of less than thirty-nine thousand (39, 000) gallons are subject to the reporting and record keeping provisions of section 6(a) and 6(b) of this rule and are exempt from all other provisions of this rule.

(c) Stationary vessels with a capacity equal to or greater than thirty-nine thousand (39, 000) gallons that store a VOL with a maximum true vapor pressure equal to or greater than five-tenths (0.5) pound per square inch absolute (psia) but less than seventy-five hundredths (0.75) psia are subject to the provisions of section 6(a), 6(b), 6(g), and 6(h) of this rule and are exempt from all other provisions of this rule.

Tanks (T001-T011) are not subject to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), because these tanks are located in Blackford County.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The BA Coating Line has applicable compliance monitoring conditions as specified below:

   (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below 1400 ^{0}F. A 3-hour average temperature that is below 1400 ^{0}F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits specified in 326 IAC 8-2-5 (Paper Coating Operations), 326 IAC 12 and 40 CFR 60.442, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the 3-hour average temperature as observed during the compliant stack test. A 3-hour average temperature that is below the 3-hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(d) The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per shift when the BA Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5.6 inches of water column, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

These monitoring conditions are necessary because the BA Coating Line must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 8-2-5 (Paper Coating Operations), and 326 IAC 2-7 (Part 70).

2. The BC-2 Coating Line has applicable compliance monitoring conditions as specified below:

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below 1400 ^{0}F. A 3-hour average temperature that is below 1400 ^{0}F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits specified in 326 IAC 2-2 (Prevention of Significant Deterioration), as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the 3-hour average temperature of the thermal oxidizer is below the 3-hour average temperature as observed during the compliant stack test. A 3-hour average temperature that is below the 3-hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(d) The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per shift when the BC-2 Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5 inches of water column, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

These monitoring conditions are necessary because the BC-2 Coating Line must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-7 (Part 70).

3. The VCS Coating Line has applicable compliance monitoring conditions as specified below:

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1400 ^{0}F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits specified in 326 IAC 8-2-5 (Paper Coating Operations) and 326 IAC 12 (40 CFR 60.440, Subpart RR), as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

(d) The Permittee shall record the total static pressure drop across the thermal oxidizer, at least once per shift when the VCS Coating Line is in operation. When for any one reading, the pressure drop across the thermal oxidizer is outside the normal range of +0.5 to -5 inches of water column, the permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

These monitoring conditions are necessary because the VCS Coating Line must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 8-2-5 (Paper Coating Operations), 326 IAC 12 (40 CFR 60.440, Subpart RR) and 326 IAC 2-7 (Part 70).

4. The three boilers have applicable compliance monitoring conditions as specified below:

(a) Visible emission notations of the three (3) boilers stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and when burning fuel oil. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

These monitoring conditions are necessary because the three (3) boilers must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 6-2-4 and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this tapes, labels and extruded web manufacturing source shall be subject to the conditions of the attached proposed Part 70 Permit No. T009-7712-00004.

Appendix A: Emission Calculations

Company Name: 3 M Hartford City Plant
Address City IN Zip: 304S 075E, Hartford City, IN 47348
Part 70 No.: T 009-7712-00004
Reviewer: Seema Roy / EVP
Date: May 09, 2003

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	BA Coating Line 3 Coating Stations	BC-1 Coating Line 2 Coating Station	BC-2 Coating Line 1 Coating Station	VCS Coating Line 1 Coating Station	Polytetrafluoroethylene (PTFE) Extrusion Line	Compounding	Storage Tanks (T001-T003, T006-T011)	3 Boilers (#1,2,3) (Natural Gas or No. 2 Fuel)	2 Thernal Oxidizers (Natural Gas)	Insignificant Activities	**TOTAL**
PM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.40	1.80	4.60
PM10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	1.50	1.80	4.60
SO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.70	0.10	0.14	83.94
NOx	0.00	0.00	0.00	0.00	0.30	0.00	0.00	23.60	19.70	23.65	67.25
VOC	1,006.00	2,800.00	2,287.74	92.00	140.00	3.69	3.10	0.90	1.10	1.30	6,335.83
CO	0.00	0.00	0.00	0.00	0.30	0.00	0.00	13.90	16.60	19.87	50.67
Xylene	1,006.00	2,800.00	2,287.74	92.00	0.00	3.69	0.10	0.00	0.00	0.00	6,189.53
Toluene	1,006.00	2,800.00	2,287.74	92.00	0.00	3.69	0.89	0.00	0.00	0.00	6,190.32
Benzene	2.01	5.60	4.58	0.18	0.00	0.01	0.10	0.00	0.00	0.00	12.47
N-Hexane	50.30	140.00	114.39	4.60	0.00	0.18	0.10	0.00	0.00	0.00	309.57
Ethyl Benzene	251.50	700.00	571.93	23.00	0.00	0.92	0.10	0.00	0.00	0.00	1,547.45
Methanol	1,006.00	2,800.00	2,287.74	92.00	0.00	3.69	1.21	0.00	0.00	0.00	6,190.64
MEK	1,006.00	2,800.00	2,287.74	92.00	0.00	3.69	1.07	0.00	0.00	0.00	6,190.50
MIBK	1,006.00	2,800.00	2,287.74	92.00	0.00	3.69	0.10	0.00	0.00	0.00	6,189.53
Formaldehyde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total emissions based on rated capacity at 8,760 hours/year.

BA Coating Line emissions are based on CP-009-3871-00004, issued on July 14, 1995.
BC-2 Coating Line emissions are based on CP-009-9364-00004, issued on July 10, 1998.
VCS Coating Line emissions are based on CP-009-3127-00004 issued on March 7, 1994.
PTFE Extrusion Line emissions are based on CP-009-5147-00004, issued on June 4, 1996.

Controlled Potential Emissions (tons/year)

Emissions Generating Activity

Pollutant	BA Coating Line 3 Coating Stations	BC-1 Coating Line 2 Coating Station	BC-2 Coating Line 1 Coating Station	VCS Coating Line 1 Coating Station	Polytetrafluoroethylene (PTFE) Extrusion Line	Compounding	Storage Tanks (T001-T003, T006-T011)	Boilers (#1,2,3) (Natural Gas or No. 2 Fuel)	Thernal Oxidizers (Natural Gas)	Insignificant Activities	**TOTAL**
PM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.40	1.80	4.60
PM10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	1.50	1.80	4.60
SO2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.70	0.10	0.14	83.94
NOx	0.00	0.00	0.00	0.00	0.30	0.00	0.00	23.60	19.70	23.65	67.25
VOC	251.50	2,800.00	485.00	9.20	14.00	3.30	1.98	0.90	1.10	1.30	3,568.28
CO	0.00	0.00	0.00	0.00	0.10	0.00	0.00	13.90	16.60	19.87	50.47
Xylene	251.50	2,800.00	485.00	9.20	0.00	3.26	0.10	0.00	0.00	0.00	3,549.06
Toluene	251.50	2,800.00	485.00	9.20	0.00	3.26	0.89	0.00	0.00	0.00	3,549.85
Benzene	0.50	1.67	0.97	0.02	0.00	0.01	0.10	0.00	0.00	0.00	3.27
N-Hexane	12.58	41.72	24.25	0.46	0.00	0.16	0.10	0.00	0.00	0.00	79.27
Ethyl Benzene	62.88	208.60	121.25	2.30	0.00	0.82	0.10	0.00	0.00	0.00	395.95
Methanol	251.50	2,800.00	485.00	9.20	0.00	3.26	1.21	0.00	0.00	0.00	3,550.17
MEK	251.50	2,800.00	485.00	9.20	0.00	3.26	1.07	0.00	0.00	0.00	3,550.03
MIBK	251.50	2,800.00	485.00	9.20	0.00	3.26	0.10	0.00	0.00	0.00	3,549.06
Formaldehyde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total emissions based on rated capacity at 8,760 hours/year, after control.

BA Coating Line emissions are based on CP-009-3871-00004, issued on July 14, 1995.
BC-2 Coating Line emissions are based on CP-009-9364-00004, issued on July 10, 1998.
VCS Coating Line emissions are based on CP-009-3127-00004 issued on March 7, 1994.
PTFE Extrusion Line emissions are based on CP-009-5147-00004, issued on June 4, 1996.

HAP Emission Calculations

Company Name: 3 M Hartford City Plant
Address City IN Zip: 304S 075E, Hartford City, IN 47348
Part 70 No.: T 009-7712-00004
Reviewer: Seema Roy / EVP
Date: May 09, 2003

UNCONTROLLED POTENTIAL EMISSIONS

Process	VOC Emissions * Potential to Emit (ton/yr)	Weight % Xylene	Weight % Toluene	Weight % Benzene	Weight % N -Hexane	Weight % Ethyl Benzene	Weight % Methanol	Weight % MEK	Weight % MIBK	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Benzene Emissions (tons/yr)	N -Hexane Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Methanol Emissions (tons/yr)	MEK Emissions (tons/yr)	MIBK Emissions (tons/yr)
BA Coating Line	1006.00																
BC-1 Coating Line	2800.00																
BC-2 Coating Line	2287.74																
VCS Coating Line	92.00																
Total Uncontrolled Potential Emissions	**6185.74**									**6185.74**	**6185.74**	**12.37**	**309.29**	**1546.43**	**6185.74**	**6185.74**	**6185.74**

* Potential to Emit based on realistic product solvent usages as reported by the source.

CONTROLLED POTENTIAL EMISSIONS

Process	** Control Efficiency	VOC Emissions * Potential to Emit (ton/yr)	Weight % Xylene	Weight % Toluene	Weight % Benzene	Weight % N -Hexane	Weight % Ethyl Benzene	Weight % Methanol	Weight % MEK	Weight % MIBK	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Benzene Emissions (tons/yr)	N -Hexane Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Methanol Emissions (tons/yr)	MEK Emissions (tons/yr)	MIBK Emissions (tons/yr)
BA Coating Line	75.00%	251.50																
BC-1 Coating Line	0.00%	2800.00																
BC-2 Coating Line	78.80%	485.00																
VCS Coating Line	90.00%	9.20																
Total Controlled Potential Emissions		**3545.7**									**3545.70**	**3545.70**	**7.09**	**177.29**	**886.43**	**3545.70**	**3545.70**	**3545.70**

* Potential to Emit based on realistic product solvent usages as reported by the source.
** Control effiency based on thermal oxidizers.

METHODOLOGY

Uncontrolled HAPS emission rate (tons/yr) = VOC Emissions * Weight % HAP
Controlled HAPS emission rate (tons/yr) = VOC Emissions * (1 - control efficiency) * Weight % HAP

Compliance with 326 IAC 8-2-5 (Paper Coating Operations)

The following calculation demonstrates compliance with the allowable VOC emissions of 2.9 pounds per gallons of coating, excluding water.

BA Coating Line

Worst Case Solvent Used (before controls)	4.86	lbs/gal	(reported by source)
Control Efficiency	75.00%		
Worst Case Solvent Used (after controls)	1.215	lb/gal	**WILL COMPLY**

Appendix A: Emission Calculations
Compounding/Mix & Mill Emission Calculations

Company Name: 3 M Hartford City Plant
Address City IN Zip: 304S 075E, Hartford City, IN 47348
Part 70 No.: T 009-7712-00004
Reviewer: Seema Roy / EVP
Date: May 09, 2003

Operating Data (provided by the source):

Total Solvent Input:

BA Coating Line	tons/yr	
BC-1 Coating Line	tons/yr	
BC-2 Coating Line	tons/yr	
VCS Coating Line	tons/yr	
PTFE Extrusion Line	tons/yr	
TOTAL	**tons/yr**	
	gal/yr	solvent density = 6 lb/gal

Maximum Throughput	gal/yr
Maximum Daily Temperature	deg. F
Methanol Vapor Pressure	psi (@85 deg. F.)
Total Tank Storage Capacity	gal

VOC Emission Calculations

Lw, Working Loss = (2.38 * 10^-5) * Mv * Pva * Q * Kn * Kp

Mv =	Vapor Molecular Wt.	lb/lb-mol (for methanol)	N, Turnovers = Total throughput (gal / Total tank capacity (gal)
Pva =	Vapor Pressure	psi	N =
Q =	Net Throughput	gal/yr	Kn, Turnover Factor = (180 + N) / (6 * N)
Kn =	Turnover factor	(always less than or equal to 1)	Kn =
Kp =	Working Loss Product Factor	(for all organic liquids)	
Lw =	**Working Loss**	**lb VOC/yr**	
		ton/yr	

Methodology:
Maximum throughput is assumed to be twice the facility solvent usage to account for opening tank lids to add solids during batch cycle.
Methanol has the highest vapor pressure of the chemicals used at the Hartford City Plant, therefore, was used as the "worst case solvent".
Calculations for Working Loss is based on AP-42, Chapter 7.1.

HAP Emission Calculations

HAP	Weight %	Total HAP (tons/yr)
Benzene		0.01
Ethyl Benzene		0.92
N-Hexane		0.18
Methanol		**3.69**
Methyl Ethyl Ketone		3.69
Methyl Isobutyl Ketone		3.69
Toluene		3.69
Xylene		3.69

Methodology:
HAP Emissions (tons/yr) = Weight % * VOC Working Loss (ton/yr)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Industrial Boilers# 1,2 and 3

Company Name: **3 M Hartford City Plant**
Address City IN Zip: **304 S 075E, Hartford City, IN 47348**
Part 70 No.: **T 009-7712-00004**
Reviewer: **Seema Roy / EVP**
Date: **May 09, 2003**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
37.7	329.9

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.3	1.3	0.1	16.5	0.9	13.9

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Industrial Boilers# 1,2 and 3

Company Name: **3 M Hartford City Plant**
Address City IN Zip: **304 S 075E, Hartford City, IN 47348**
Part 70 No.: **T 009-7712-00004**
Reviewer: **Seema Roy / EVP**
Date: **May 09, 2003**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.464E-04	1.979E-04	1.237E-02	2.969E-01	5.608E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	8.247E-05	1.814E-04	2.309E-04	6.268E-05	3.464E-04

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Industrial Boilers # 1, 2 and 3
#1 and #2 Fuel Oil

Company Name: **3 M Hartford City Plant**
Address City IN Zip: **304 S 075E, Hartford City, IN 47348**
Part 70 No.: **T 009-7712-00004**
Reviewer: **Seema Roy / EVP**
Date: **May 09, 2003**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
		0.5
37.659	2356.37743	

	Pollutant				
	PM*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	71 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	2.4	83.7	23.6	0.4	5.9

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)
*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 7 for HAPs emission calculations.

Appendix A: Emissions Calculations
Industrial Boilers # 1, 2 and 3
#1 and #2 Fuel Oil
HAP Emissions

Company Name: **3 M Hartford City Plant**
Address City IN Zip: **304 S 075E, Hartford City, IN 47348**
Part 70 No.: **T 009-7712-00004**
Reviewer: **Seema Roy / EVP**
Date: **May 09, 2003**

HAPs - Metals

	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	6.60E-04	4.95E-04	4.95E-04	4.95E-04	1.48E-03

HAPs - Metals (continued)

	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	4.95E-04	9.90E-04	4.95E-04	2.47E-03

Methodology is the same as page 6

No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Thermal Oxidizers# 1and 2

Company Name: **3 M Hartford City Plant**
Address City IN Zip: **304 S 075E, Hartford City, IN 47348**
Part 70 No.: **T 009-7712-00004**
Reviewer: **Seema Roy / EVP**
Date: **May 09, 2003**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
45.0	394.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.4	1.5	0.1	19.7	1.1	16.6

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 9 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Thermal Oxidizers# 1and 2
HAP Emissions

Company Name: **3 M Hartford City Plant**
Address City IN Zip: **304 S 075E, Hartford City, IN 47348**
Part 70 No.: **T 009-7712-00004**
Reviewer: **Seema Roy / EVP**
Date: **May 09, 2003**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.139E-04	2.365E-04	1.478E-02	3.548E-01	6.701E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	9.855E-05	2.168E-04	2.759E-04	7.490E-05	4.139E-04

Methodology is the same as page 8.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Tank HAP Emissions - Maximum PTE

Company Name: 3 M Hartford City Plant
Address City IN Zip: 304 S 075E, Hartford City, IN 47348
Part 70 No.: T 009-7712-00004
Reviewer: Seema Roy / EVP
Date: May 09, 2003

Tank Number	Tank ID Number	Outdoor/ Indoor	Product Stored	** Hazardous Air Pollutants (in tons per year)									
				Benzene	Ethyl Benzene	Formaldehyde	N-Hexane	Methanol	MEK	MIBK	Toluene	Xylene	Total
1	T001	Outdoor	Toluene										0.74
2	T002	Outdoor	Methanol										1.11
3	T003	Outdoor	MEK										0.82
6	T006	Outdoor	No. 2 Fuel Oil										0.00
7	T007	Indoor	Waste Solvent *										0.06
8	T008	Indoor	MEK										0.15
9	T009	Indoor	Toluene										0.05
10	T010	Indoor	Heptane										0.00
11	T011	Indoor	Rinse Solvent										0.04
Total HAP (tons per year)				**0.10**	**0.10**	**0.00**	**0.10**	**1.21**	**1.07**	**0.10**	**0.89**	**0.10**	**2.97**

Note: All storage tank emissions estimated using EPA's TANKS 3.0 software program.

* Waste solvent tank emissions were predicted for methanol, since methanol has the highest vapor pressure of the solvents stored in the tank.

** Hazardous Air Pollutant Emissions are provided for each solvent that could be stored in the tank.

Appendix A: Emission Calculations
Tank VOC Emissions - Maximum PTE

Company Name: 3 M Hartford City Plant
Address City IN Zip: 304 S 075E, Hartford City, IN 47348
Part 70 No.: T 009-7712-00004
Reviewer: Seema Roy / EVP
Date: May 09, 2003

Tank Number	Tank ID Number	Outdoor/ Indoor	Product Stored	Losses (Tons per Year)		Total VOC
				Standing	Working	Tons/yr
1	T001	Outdoor	Toluene			0.74
2	T002	Outdoor	Methanol			1.12
3	T003	Outdoor	MEK			0.81
6	T006	Outdoor	No. 2 Fuel Oil			0.00
7	T007	Indoor	Waste Solvent *			0.06
8	T008	Indoor	MEK			0.15
9	T009	Indoor	Toluene			0.05
10	T010	Indoor	Heptane			0.12
11	T011	Indoor	Rinse Solvent			0.04
Total VOC				**0.59**	**2.51**	**3.10**

Note: All storage tank emissions estimated using EPA's TANKS 3.0 software program.

* Waste solvent tank emissions were predicted for methanol, since methanol has the highest vapor pressure of the solvents stored in the tank.